

# STIC Search Report Biotech-Chem Library

# STIC Database Transling Number 1986

TO: Patricia Duffy

Location: rem/3B05/3C18

**Art Unit: 1645** 

Wednesday, July 13, 2005

Case Serial Number: 10/063546

From: Toby Port

**Location: Biotech-Chem Library** 

**REM-1A59** 

Phone: 571-272-2523

toby.port@uspto.gov

## Search Notes

**Examiner Duffy,** 

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Toby Port X22523



(Oposn) MIDIA BOOM SIM

# Duffy, Patricia

From:

Duffy, Patricia

Sent:

Sunday, July 10, 2005 10:27 AM STIC-Biotech/ChemLib

To:

Subject:

SPDI search

10/063,546

SEQ ID NO:38 and oligomers thereof. standard spdi output.

Patricia A. Duffy, Ph.D. Art Unit 1645 Remsen 3B05; Mailbox 3C18 571-272-0855

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### STIC-Biotech/ChemLib

From:

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Patricia A. Duffy, Ph.D. Art Unit 1645 Remsen 3B05; Mailbox 3C18 571-272-0855

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STAFF USE ONLY

Searcher: Searcher Phone: 2-Date Searcher Picked up:\_ Date Completed:\_ Searcher Prep/Rev. Time:\_ Online Time:\_

Type of Search

Interference:\_ \_ Oligomer:\_ Encode/Transl:\_ Structure#:\_ Inventor: Litigation: Vendors and cost where applicable STN: DIALOG: QUESTEL/ORBIT: LEXIS/NEXIS:

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US2003013153-A1.
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Human PRO polypeptide #85. US2003032102-A1.
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Human PRO polypeptide #19.
US2002182638-A1.
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Human PRO polypeptide #85.
US2003032130-A1.
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Human secreted polypeptide |
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Human PRO1344 polypeptide.
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US2003032103-A1.
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US2003022301-A1.
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US2003036154-A1.
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US2003027262-A1.
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US2003022187-A1.
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US2003036165-A1.
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US2003017543-A1.
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Human PRO polypeptide #85.
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Human secreted and
US2002197615-A1.
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Human PRO polypeptide #85.
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Human PRO1344 polypeptide.
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Novel human secreted and transmembrane
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide E
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide PRO1344,
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Human secreted/transmembrane protein
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Human secreted polypeptide |
US2003064447-A1.
03-APR-2003.
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Human secreted polypeptide I
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03-APR-2003.
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Human secreted polypeptide
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Human secreted/transmembrane
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Human PRO polypeptide #85.
US2003068703-A1.
10-APB-2007
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Human secreted polypeptide
US2003073175-A1.
                                                             Human secreted poly US2003104548-A1.
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Human secreted/transmembrane protein
US2003068695-A1.
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide
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US2003082717-A1.
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Human secreted polypeptide 1 US2003044917-A1. 06-MAR-2003.
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Human secreted polypeptide
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Human secreted polypeptide PRO1344,
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US2003104543-A1.
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US2003036130-A1.
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US2003068718-A1.
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US2003068724-A1.
10-APR->nr
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US2003068727-A1.
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Human secreted polypeptide
US2003054478-A1.
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06-MAR-2003.
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Human secreted/transmembrane
US2003068776-A1.
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Human PRO polypeptide #85.
US2003068758-A1.
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Human secreted/transmembrane
US2003068714-A1.
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Human secreted polypeptide
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Novel human secreted and transmembrane
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ABM06446 standard; protein;
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Human secreted polypeptide !
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US2003054481-A1.
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US2003059885-A1.
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US2003032125-A1
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RESULT 300
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                                                            Human PRO polypeptide #85. US2003027265-A1. 06-FEB-2003.
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Human PRO polypeptide #85.
US2003054461-A1.
20-MAR-2003.
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Human secreted polypeptide |
US2003104557-A1.
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Human PRO polypeptide #85.
US2003073182-A1.
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Human secreted polypeptide !
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US2003064458-A1.
03-APR-2003.
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US2003073171-A1.
17-APR-2003.
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Human secreted/transmembrane
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US2003032121-A1.
13-FEB-2003.
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide PRO1344,
US2003049783-A1.
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Human secreted pol
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US2003049744-Al.
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RESULT 320
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US2003049766-A1.
19-ARR-2003.
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Human secreted pol)
US2003104540-A1.
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Human secreted polypeptide PRO1344,
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Human secreted/transmembrane
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US2003049767-A1.
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27-MAR-2003.
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Human secreted polypeptide I
US2003104554-A1.
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US2003068730-A1.
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Human secreted poly
US2003059879-A1.
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Human PRO polypeptide #85.
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US2003068698-A1.
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Human secreted polypeptide !
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Human secreted/transmembrane
US2003073181-A1.
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Human secreted polypeptide I
US2003104552-A1.
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Human secreted polypeptide |
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Human secreted poly
US2003104551-A1.
                                          ABR74317 standard; protein;
Human secreted polypeptide I
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Human secreted polypeptide PRO1344,
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Human secreted/transmembrane
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Human secreted polypeptide
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Human secreted polypeptide |
US2003064443-A1.
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Human secreted polypeptide
US2003059884-A1.
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                                      US2003068697-A1.
                                                ABO29419 standard; protein; 7
Human secreted/transmembrane
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US2003036151-A1.
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05-JUN-2003.
                   Human secreted p
US2003040067-A1.
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Human secreted/transmembrane protein (PRO)
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Human secreted polypeptide PRO1344,
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10-APR-2003.
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US2003064450-A1.
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US2003049764-A1.
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US2003049756-A1.
13-MAR-2003.
(GETH ) GENENTECH INC.
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Human secreted polypeptide I
US2003068754-A1.
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Human secreted polypeptide |
US2003104556-A1.
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Human secreted polypeptide PRO1344,
US2003096358-A1.
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                                   ABR72792 standard;
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US2003040065-A1.
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Human secreted polypeptide
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Human secreted/transmembrane
US2003068715-A1.
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Human secreted polypeptide PR01344,
US2003068723-A1.
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Human secreted polypeptide
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Human secreted polypeptide PRO1344,
US2003068744-A1.
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Human secreted polypeptide
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Human secreted/transmembrane
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Human secreted polypeptide PRO1344,
ABM32435 standard; protein;
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US2003068762-A1.
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Human secreted/transmembrane
US2003049681-A1.
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Human PRO polypeptide #65.
US2003045463-A1.
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US2003068771-A1.
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              ADC06994 standard; pro
Human PRO1344 protein.
US2003060602-A1.
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide PRO1344,
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ADD07530 standard; protein; 720 AA. Novel human secreted and transmembrane US2002193399-A1.
                                                                      ADC81888 standard; protein;
Human PRO polypeptide #65.
US2003083461-A1.
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US2003138882-A1.
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24-ADD-200
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27-MAR-200
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ADE26754 standard; protein; 720 AA.
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Novel human secreted and transmembrane
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Human PRO polypeptide #19.
US2003180794-A1.
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Novel human secreted and transmembrane
US2003181643-A1.
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.5e-204;
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Query Match
Best Local Similarity
RESULT 663
ID AAB70532 standard; p
DE Human PRO2 protein s
PN W0200110902-A2.
PD 15-FEB-2001.
PA (CURA-) CURAGEN CORP
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RESULT 662
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US2004058411-A1.
25-MAR-2004
                                                                                                                                                                                                                                Novel human secreted and tra. US2004048335-A1.
                                                                                                                                                                                                                                                                                                          Novel human secreted and transmembrane US2004053358-A1.
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US2003186407-A1.
02-OCT-200
                                                                                         Novel human secr
US2004091959-A1.
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Human PRO polypeptide #85.
US2004038337-A1.
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US2003187229-A1.
02-OCT-2003.
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RESULT 670
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Human secreted protein, POL
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22-MAR-2001.
(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                  Human heat mitochondrial WO2003087768-A2.
                                                                                                                                                                                                                                                                                                    Human protein sequence SEQ ID EP1074617-A2.
                                                                                                                                                                                                                                                                                                                            AAB93670 standard; protein;
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Human TANGO 215 protein.
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Human POLYX polypeptide #13
                               WO2004031386-A1.
                                         ADS85034 standard; protein; 737 AA.
Human atopic dermatitis-related protein
                                                                                                                   WO2004028479-A2.
                                                                                                                             ADN04640 standard; pro
Antipsoriatic protein
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ry Match 99.4%;
Local Similarity 97.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200018904-A2.
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(FERN/) FERNANDES E.
(HERR/) HERRMANN J L.
(LIUX/) LIU X.
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23-OCT-2003.
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T/) RASTELLI L.
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sequence #505.
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POLY13
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Pred. No. 3.1e-204;
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Pred. No. 2.8e-203;
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Pred.
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Query Match
Best Local Similarity
RESULT 675
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Best Local Similarity
RESULT 672
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(HELI-) HELIX RES INST.
91.6%;
Match 11-rity 90.1%;
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                                                                                    ADR41485 standard; protein; 551
Human CD-like molecule HSXDF41,
WO200226930-A2.
AAM41706 standard;
Human polypeptide (
WO200153312-A1.
                                                                            04-APR-2002
                                                                                                                                                               WO200061774-A2.
19-OCT-2000.
                                                                                                                                                                                    Clone HFPEY75
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ry Match 88.7%;
t Local Similarity 90.0%;
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:ry Match 91.3%; Score 
:t Local Similarity 90.1%; Pred.
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WO200018904-A2.
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                                                                (HUMA-) HUMAN
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PRTS-17 protein.
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SEQ ID NO
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No. 2.8e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3612;
No. 1
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                                             2944;
No. 9.
                                                                                                                                                                                                                                                                                                      3500.5; DB 5;
No. 1.2e-180;
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No. 2.9e-203;
                                                                                                                                2946.5; DB 3;
No. 7.2e-151;
                                                                                                                                                                                                                                                                         NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (mC-PLACE1009992)
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                                                                                                  H
                                                                                                                                                                                                                   99.5; DB 4
. 1.4e-158;
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2.8e-203;
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                                                                                                  NO:284
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                                             DB 5;
.5e-151;
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                                                        551;
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                                                                                                                                            570;
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                                                                                                                                                                                                                                                                                                                    649;
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AA-) HUMAN GENO.

LY Match

Best Local Similarity

RESULT 689
ID ADL77920 stand-
DE Albumin fv-
PN US2004-
PD 15
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RESULT 682
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Best Local S
RESULT 687
                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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                                                                                                                                                                                  AAE20797 standard;
Human gene 5 encode
WO200218435-A1.
                                                                                                                                                                                                                                                                                                                                               AAM39920 standard;
Human polypeptide
WO200153312-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human albumin fusion protein #1327. WO200177137-A1.
                                                                                                     Human albumin fusion WO200177137-A1.
                                                                                                                         ABG64653 standard;
                                                                                                                                                                                                                                                                   Human polypeptide
WO200153312-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                        ADL06662 standard; protein;
Human 3T3 cell conversion p:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human gene 5
                                                                                                                                                                                                                                                                                                                                                                                                                                CN1403477-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAE20817 standard;
                                                                              |8-OCT-2001.
(HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                             26-JUL-2001.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                       AAM39957 standard;
                                                                                                                                                                                                                                                                                                                          26-JUL-2001.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Albumin fusion p:
US2004010134-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-OCT-2001.
(HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                       (SHAN-) SHANGHAI XINSHIJIE GENE TECHN DEV CO
CY Match 52.2%; Score 2059; DB
Local Similarity 95.6%; Pred. No. 3.4e-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ROSE/) ROSEN C A. (HASE/) HASELTINE W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL77919 standard; protein; 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HUMA-) HUMAN GENOME
                                                                                                                                                                 (HUMA-) HUMAN GENOME
                                                                                                                                             Local Similarity
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                             fusion protein relat
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encoded secrete
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                                                                                                                                                                                                                                                                                                                                                           seQ ID NO
                                                                                                                                                                                                                                                                           ; protein; seQ ID NO
                                                                                                             protein; 323 AA.
on protein #1328.
                                                                                                                                           SCI INC.
43.3%;
94.1%;
                                                                                                                                                                                                                          48.4%;
100.0%;
                                                                                                                                                                                                                                                                                                         48.4%;
100.0%;
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99.3%;
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99.3%;
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94.1%;
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99.3%;
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96.6%;
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                                                                                  SCI INC.
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                                cein; 323 AA.
related therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  related
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promoter
                                                                                                                                                                                                                                                                            359 AA.
3102.
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3065.
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ed protein HSLGU75,
                                                             Score
Pred.
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Pred.
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Pred.
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Pred.
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Pred. No. 3
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Pred.
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Pred.
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Pred.
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Pred. No. 3.4e-103;
                                                                                                                                                                                             protein
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                                                                                                                                                                                                                                                                                                           1909;
                                                                                                                                            1708.5; DB
No. 2.1e-84;
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No. 3
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No. 3
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No. 3
                                                              1708.5; DB
No. 2.1e-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                         FP938
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No. 4.8e-131;
                                                                                                                                                                                             HSLGU75,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 8;
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.2e-122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 5;
.2e-122;
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.6e-95;
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.6e-95;
                                 protein
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Best Local Similarity
RESULT 698
ID AAW43393 standard; p
DE Singapore horseshoe
PN SG42456-A1.
PD 15-AUG-1997.
PA (UYSI-) UNIV SINGAPO
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                                                                                                                               Best Local Similarity RESULT 697
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Best Local Similarity
RESULT 691
                                                                                                                                                                                                             Best Local Similarity
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                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                         Recombinant N-terminally truncated H US5985590-A.
                                                                                      ABP72334 standard; protein;
Horseshoe crab Factor C.
WO2003002976-A2.
09-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP72332 standard; pro
Horseshoe crab Factor
WO2003002976-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM24485 standard;
Human EST encoded |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HASE/) HASELTINE W
                                                                                                                                                                               Horseshoe crab
WO200127289-A2.
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16.9%;

15.4%;

15.4%;
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ry Match 16.9%;
t Local Similarity 25.4%;
                                                                                                                                                                                                   AAB60935 standard;
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ry Match 16.9%;
t Local Similarity 25.4%;
                                                                                                                                                                                                                                                                                                                                                    AAW94302 standard; protein;
Horseshoe crab Factor C prot
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WO9915676-A1.
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                                                                             (WHIK ) BIOWHITTAKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (WHIK ) BIOWHITTAKER INC.
                                                                                                                                                                                                                                                                                                                                                                                                      (UYSI-) UNIV SINGAPORE NAT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY05750 standard;
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                                                                                                                                                                                                                                                                                                                                                                                    ocal Similarity
                            horseshoe
                                                                                                                                                                                         recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                     ard; protein;
Factor C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein;
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e crab factor C proenzyme
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                             crab
                                                        R INC.
16.9%;
25.4%;
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25.4%;
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94.1%;
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91.4%;
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otein #2.
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Factor C
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Pred. No. 2
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                            proenzyme
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                                                          665;
No. 9.
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No. 9.
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No. 4.
                                                                                                                                                                                                                                                                       Horseshoe
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l.le-28;
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.8e-56;
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.7e-28;
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.7e-28;
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-84;
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UNIV SINGAPORE NAT

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Best
RESULT
ID AD
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PN WO
PD 25
PA (N
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ID AAY117
DE Human
PN WO9906
PD 11-FEB
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ID AA
DE Ho
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Best Local
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16-NOV-1999.
(UYSI-) UNIV SINGAPORE NAT.
16-9%;
ary Match 16.9%;
25.4%;
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12-JAN-1999.
(UYSI-) UNIV SINGAPORE NAT.
16.9%;
12V Match 16.9%;
25.4%;
                                                                                                                                                                                                                                                                AAM41743 standard;
Human polypeptide
WO200153312-A1.
                                                                                                                                                                                                                                                                                                                                             ABP72333 standard; protein; Horseshoe crab Factor C. WO2003002976-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Horseshoe crab recombinant F US5985590-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW94301 standard; protein; 1083 AA.
Horseshoe crab Factor C protein #1.
US5858706-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Horseshoe crab
WO9915676-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY05749 standard; protein; Horseshoe crab Factor C.
                           ADL91028 standard; protein; Human mannose binding lectir WO2004024925-A2.
                                                                                                                 ADE87459 standard; protein;
Human MBL-associated serine
                                                                                                                                                                                              AAY11743 standard; pro
Human 5' EST secreted
                                                                                                        EP1344533-A1.
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                                                                                                                                                                                     WO9906550-A2.
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ry Match 16.9%;
r Local Similarity 25.4%;
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                                                                                                                                                                   GEST ) GENSET.
                                                                                                                                                                                                                                            HYSE-) HYSEQ INC.
                                                                                     NATL-) NATLMMUNE AS.
                                                                                                                                                                                                                                                                                                                          WHIK ) BIOWHITTAKER
                                                          Local Similarity
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          NATIMMUNE
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          AS
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ted protein SEQ :
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25.4%;
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25.4%;
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25.4%;
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24.6%;
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97.1%;
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85.4%;
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Factor C
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                                                                                                                  699 AA.
protease-1
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Pred.
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Pred. No. 1
                                      amino
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Pred.
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Pred.
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Pred. No. 1
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No. 1
 475;
                                      acid
                                                                                                                                                                                                                            662; DB 4;
No. 2.3e-28;
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No. 1e-27;
                                                                   476; DB 7;
No. 1e-17;
                                                                                                                                               580; DB 2;
No. 4.3e-24;
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                                     sequence
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Query Match
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RESULT 709
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RESULT
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RESULT 715
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RESULT 712
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                                                                                                                                                                                                                                                                                                      Human MBL-associated serine EP1344533-A1.
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Human diagnostic and therape
Human complement WO2003072827-A1. 04-SEP-2003.
                                                                                                                                                                            ABB50288 standard; protein; 705 AA.
Complement component 1 r ovarian tumour
W0200175177-A2.
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(INCY-) INCYTE CORP.
                                                                20-AUG-2001.
(BIOC-) BIO CLUE &
(KIMT/) KIM T Y.
                                                                                               AAG80757 standard;
Human Clr protein.
KR2001077614-A.
                                                                                                                                                            (USSH)
                                                                                                                                                                                                                                       (BIOC-) BIO CLUE & (KIMT/) KIM T Y.
                                                                                                                                                                                                                                                          20-AUG-2001
                                                                                                                                                                                                                                                                              Murine Clr protein
                                                                                                                                                                                                                                                                                                                                                          AAB47559 standard;
Protease PRTS-1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADL91027 standard;
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(NATL-) NATLMMUNE AS.
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                   ADP65211 standard; protein; 70
Human complement component 1,
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                                                                                                                                                                                                                                                                                        AAG80756 standard;
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                                                                                                                                                                     11-OCT-2001
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h 10.2%; Score 403.5
Similarity 22.9%; Pred. No. 8
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24.4%;
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22.9%;
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Pred. No. 6
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No. 8.4
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No. 3.
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No. 2
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No. 2.
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No.
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2e-17;
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8.4e-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
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                                                 ; DB 5;
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.2e-17;
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.6e-15;
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.9e-17;
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.9e-17;
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Best Lock
RESULT 717
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RESULT 718
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RESULT
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Best Local (
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(JENS/) JENSENIUS J
(THIE/) THIEL S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABG31619 standard; protein; Human mannin-binding lectin US2002082208-A1.
                                                                                                                                                         ADQ27010 standard; protein; Human MASP-2 mature polypept W02004050907-A2.
                                                                                                                                                                                                                                                             ADE87460 standard; protein; Human MBL-associated serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAE14564 standard; protein;
Human MASP-2 protein.
WO200206460-A2.
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                                                        WO200206460-A2.
                                                                   AAE14565 standard; peptide;
Human mature MASP-2 protein.
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                                                                                                                       17-JUN-2004.
(UYAA-) UNIV AARHUS.
(AARH ) AARHUS AMT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADL91025 standard;
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(THIE/) THIEL S.
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                    JENS/) JENSENIU
                                 JENS/) JENSENIUS J
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binding lectin
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                                                                                                                                                                 protein; 671 AA.
polypeptide.
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22.7%;
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n amino
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Pred.
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Pred. No. 8.4e-14;
Score 398.5; DB 5; Pred. No. 1.5e-13;
                                                                                                   Score 399.5;
Pred. No. 1.
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No. 1.2e-13;
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No. 1.1e-13;
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1.1e-13;
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Query Match
Best Local Similarity
RESULT 733
ID ADJ755392 standard; p
DE Marker gene related
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ID ADE564
DE Rat Pr
PN WO2003
PD 27-FEB
PA (GEHO
PA (FARB
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RESULT 726
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27-FEB-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                AAB43579 standard; protein; 760 AA. Human cancer associated protein sequence WO200055350-A1.
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Rat Protein D88250,
WO2003016475-A2.
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                                                                                                                                                                                                                                                                                                 ADD45340 standard; protein; (Human Protein Q9UCV3, SEQ ID W02003016475-A2.
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(GEHO ) GEN HOSPITAL CORP.
(FARB ) BAYER AG.
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(GEHO ) GEN HOSPITAL CORP.
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                                                                     04-SEP-2003
                                                                                 Human complement WO2003072827-A1.
                                                                                            ADP65315 standard; protein; 688 AA. Human complement cls component prec
                                                                                                                                                     (GEHO ) GEN HOSPI
(FARB ) BAYER AG.
                                                                                                                                                                              WO2003016475-A2.
27-FEB-2003.
                                                                                                                                                                                                      ADE56420 standard; protein; 688
Human Protein Q9UCV3, SEQ ID NO
                                                                                                                                                                                                                                                                (GEHO ) GEN HOSPITAL (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC.
ry Match 8.5%;
t Local Similarity 21.7%;
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(FARB ) BAYER AG.
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(FARB ) BAYER AG.
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27-FEB-2003.
ADJ75392 standard; protein; 688 AA.
Marker gene related amino acid sequence SEQ ID NO:644.
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                                 CHILDREN'S HOSPITAL MEDICAL CENT.
h
8.5%; Score 334;
Similarity 21.7%; Pred. No. 4.
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NO 10771.
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NO 2271.
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Human cell surface
WO200295007-A2.
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(CORV-) CORVAS INT INC.
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WO200157194-A2.
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Human PRSS7 protein.
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(NATI-) NATIMMUNE
       ADJ70437 standard; protein; 1019
Human heat mitochondrial protein
                                                                   US2004001801-A1.
                                                                           Human transmembrane
                                                                                   ADJ46924 standard;
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WO2002103028-A2.
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        therapeutic
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Query Match
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29-NOV-2001.
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(MITO-) MITOKOR.
(BUCK-) BUCK INST AGE
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                                                                 Cancer and neurogenesis WO200190354-A1.
                                                                                                                                                     AAU11812 standard; protein;
Cancer and neurogenesis asso
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Human Protein C zymogen SC.
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(BUCK-) BUCK INST
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        standard;
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14-SEP-2000.
(GEOU) UNIV GEORGETOWN.
8-3%;
ATV MATCh 8-3%;
21.4%;
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Human protein sequence SEQ
WO200153455-A2.
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Human matriptase (truncated
WO200053232-A1.
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(UYLE-) UNIV
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Protein #47 with ir
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(HYSE-) HYSEQ INC.
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 ADI16817 standard;
Human NOVX protein
                                                                                  AAB35465 standard; protein; 855 AA.
Human membrane-type serine protease
                                                                                                                                                          WO200053232-A1.
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(UYLE-) UNIV LEEDS.
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HPEP-1 protein
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protein; 8
homologue
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e Ser kinase homologue,
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associated
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ID NO:1143
855 AA.
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Pred. No. 9
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No. 1.1e-09;
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No. 1.2e-09;
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RESULT 762
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(CURA-) CURAGEN CORP.
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Human NOVX protein
WO200268649-A2.
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Human NOVX protein
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Lung cancer ass
WO200055180-A2.
               AAB58274 standard; protein; 449
                                                                                                      Human prostatic wo2004076614-A2.
                                                                                                                                                          (PILA/) PILARSKY C.
                                                                                                                                                                                                             Human prostatic (
WO2004076614-A2.
                                                                                                                                                                                                                              ADR66721 standard;
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(EOSB-) EOS BIOTECHNOLOGY INC.
8.3%; Score
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                                                                             (HINZ/) HINZMANN B.
(DAHL/) DAHL E.
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(DAHL/) DAHL B.
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                                                           ROSE/) ROSENTHAL A.
HERM/) HERMANN K.
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associated polypeptide
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Best Local Similarity
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ID ADII6816 standard; p
DE Human NOVX protein h
PN W0200268649-A2.
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                                                                                                                                                                Type II transmembrane WO200272786-A2.
                  WO200268649-A2.
                          ADI16882 standard;
Human NOVX protein
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Human NOVX protein
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US2004033582-A1.
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(ROSE/) ROSEN
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POWELL J R.
RAMANATHAN C S
SWANSON B.
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Similarity 21.6%;
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Human NOVX protein
WO200268649-A2.
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Human cell surface
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                                                                                                                                                                                                                                                                                                                                                  AAE29791 standard; protein;
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Human membrane-type serine |
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                                            ADG65326 standard;
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                                                                                                                                                                                      ADB97551 standard; protein;
Human MTSP1, SEQ ID NO:2.
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DIEGO LLC.
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                                                  Human protein of the invention NOV4e W02003102155-A2.
                                                                                                                                  ADH71146 standard;
Human protein of th
WO2003102155-A2.
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ADH71136 standard; protein; 3546 AA.
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Human novel proteinNOV 8.
US2004033493-A1.
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ry Match 8.3%; Score
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GUSEV V Y.
COLMAN S D.
WOLENC A R.
PENA C E A.
FURTAK K.
GROSSE W M.
ALSOSSE W D.
LEPLEY D M.
RIEGER D K.
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SPYTEK K A.
ZERHUSEN B D.
PATTURAJAN M.
SHIMKETS R A.
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PADIGARU M.
ANDERSON D W.
                                     CURAGEN CORP
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MTSP1) serine protease.
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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
8.1%; S.
Match
1. Tity 24.7%; F
                                                                                                            ADH71142 standard; protein; 2612 AA. Human protein of the invention NOV4d WO2003102155-A2.

(CURA-) CURAGEN CORP.
                                           Human cub and sushi
WO200264791-A2.
                                                                  ABG79169 standard;
                                                                                                                                                                                                                                        AAU99078 standard; protein;
Human Protein C zymogen prot
WO200232461-A2.
                                                                                                                                                                                                                                                                                                                                ADG83836 standard; protein; 455 AA. Rough scale snake venom protease. W02003082214-A1.
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Human Protein C zymogen protein mutant
WO200232461-A2.
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WO200210199-A2.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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Similarity 23.4%;
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HOLDINGS LTD.
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protein mutant L349N/D351T
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Best Local Similarity

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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
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AAE20900 standard; proted Human C3b/C4b complement WO200210199-A2.
                                                                                    Bovine enterokinase. WO9416083-A1.
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Human protein of the invent
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WO200232461-A2.
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(CURA-) CURAGEN CORP.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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                                                             (GEMY) GENETICS INST INC.
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           protein; 3069 AA.
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No. 1
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No. :
                                          317.5;
No. 4e-
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No. 1
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No. 1
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No. 1
                                                                                                                              317.5; DB 5
No. 2.2e-09;
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                                          1.5; DB
4e-09;
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2.2e-09;
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            protein
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.2e-08;
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317.5;

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Length

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Best Loca
RESULT 816
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RESULT 814
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RESULT 813
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Human Protein C zym
WO200232461-A2.
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WO200210199-A2.
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Human C3b/C4b complement receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MAXY-) MAXYGEN
                                                                                                                                                                           Human Protein C zymogen
WO200232461-A2.
                                                                                                                                                                                                                                                                                         AAU99071 standard; protein; 419 AA.
Human Protein C zymogen protein mutant S336N/M338S
WOZ00232461-A2.
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(MAXY-) MAXYGEN HOLDINGS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                      Human Protein
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Human Protein C zymogen protein mutant
                        (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
                                                    25-APR-2002
                                                                WO200232461-A2.
                                                                         AAU99079 standard; protein; 419
Human Protein C zymogen protein
                                                                                                                                        (MAXY-) MAXYGEN
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                                                                                                                                                                                                     AAU99087 standard; protein; 419
                                                                                                                                                                                                                                                      (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
                                                                                                                                                                                                                                                                                25-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                    AAU99081 standard; protein; 419 AA.
Human Protein C zymogen protein mutant D351N/Q353S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
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WO200232461-A2.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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C zymogen prot
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HOLDINGS LTD
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protein mutant
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protein mutant L220N/R222T
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Pred.
  Score 315.5; DB 5; Pred. No. 2.8e-09;
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Pred. No.
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mutant L349N/D351S
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No. 2.8e-09;
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No. 1.4e-08;
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          Epithin protein. W0200203787-A2.
                                                                                                        ADM77504 standard; protein;
Human protein C variant #2 (
WO2003106666-A2.
                                                                                                                                                                                                                                                                                               AAU99043 standard; protein; 419
Human Protein C zymogen protein
WO200232461-A2.
                               AAE23083 standard;
                                                                                                                                                                                                        ADG83832 standard; pro
Red belly black snake
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Human Protein C zymogen protein
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MAXY-) MAXYGEN HOLDINGS LTD.
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MAXY-) MAXYGEN HOLDINGS LTD.
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                                                                        MAXY-) MAXYGEN APS.
MAXY-) MAXYGEN HOLDINGS
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MAXY-) MAXYGEN HOLDINGS LTD.
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8.0%;
h 8.0%;
Similarity 23.0%;
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ake venom
                              protein; 855 AA
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8.0%;
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mutant L296N.
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mutant I348N/G350S
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mutant R306N/K308S
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                                               AAU99023 standard; protein; 419
Human Protein C zymogen protein
WO200232461-A2.
                                                                                                                               Human Protein C zymogen protein mutant WO200332461-A2.
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Human Protein C zymogen protein
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                   (MAXY-) MAXYGEN
                                                                                                      (MAXY-) MAXYGEN
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(MAXY-) MAXYGEN HOLDINGS LTD.
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                                                                                                                                                                                                                                    duman Protein
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 Similarity
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                   APS.
HOLDINGS LTD.
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HOLDINGS LTD.
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HOLDINGS LTD.
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21.4%;
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21.4%;
7.9%;
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21.4%;
                                                                                                                                                                                                                                                                                                                                                                                                            protein
                                                                                                                                                                                                                                                                                                                                                                        LTD
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Ne SeqID
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ue SeqID
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n mutant
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No. 6
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No. 6.
313.5;
No. 3.0
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No.
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No.
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No.
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No.
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No.
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No. 6.7e-09;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein
                                                                                                                                                                                                                                                               3.6e-09;
                                                                                    ω <u>.</u>..
                                                                                                                                                                                                                                                                                                                                                                                                                                          ω <u>;</u>,
                                                                                                                                                                         ω <u>(</u>5
                                                         K218N/L220S
                                                                                                                                                                                                                                                                                                                       L220N/R222S
                                                                                                                                                                                                                                                                                                                                                     ω <u>i</u>5
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.6e-09;
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.6e-09;
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.7e-09;
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.7e-09;
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RESUL
                                                              RESULT 843
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                                                                 MOZVOZ-
25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S
                                                                                                                                                                                                                                                     Human Protein C zymogen protein W0200232461-A2.
                                                                                                                                                                                                                                                                                                                                                                                     AAU99097 standard; protein; 419 AA.
Human Protein C zymogen protein mutant D189N/K191N.
WO200232461-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU99072 standard; protein; 419 AA.
Human Protein C zymogen protein mutant S336N/M338T.
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(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADI16878 standard; protein; 855 AA.
Rat NOVX protein homologue SeqID 414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200268649-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI16881 standard; protein;
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(CURA-) CURAGEN CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADI16820 standard; protein; 855 A
Rat NOVX protein homologue SeqID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200268649-A2.
                                  Human Protein C
                                                  AAU99069 standard;
                                                                                                                                                        AAU99064 standard; protein; 419
Human Protein C zymogen protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200232461-A2.
                       VO200232461-A2.
                                                                                                                                                                                                         MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%;
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MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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MAXYGEN APS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard; protein; 855 AA. protein homologue SeqID 417.
                                    zymogen
                                  protein; 419
mogen protein
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7.9%;
23.5%;
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21.4%;
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24.5%;
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21.4%;
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Pred. No.
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Pred.
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Pred. No. 4
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Pred. No. 4.1e-09;
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Pred. No. 7.5e-09;
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D 356.
                                    AA.
mutant
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mutant
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mutant
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No. 7.
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No. 7.5e-09;
                                                                            312.
No.
                                                                                                                                                                                               312.5; DB 5;
No. 4.1e-09;
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. 4.6e-09;
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4.1e-09;
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                                     V334N
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Query Match
Best Local S
RESULT 851
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Best Local S
RESULT 849
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RESULT 845
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(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; St
                                                                                                                                                                                                                                                                                   AAU99067 standard; protein; 419 AA.
Human Protein C zymogen protein mutant F316N/L318S
WO200232461-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W0200232461-A2.
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WO200232461-A2.
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Human Protein C zymogen protein mutant
W0200232461-A2.
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Human Protein C zymogen prot
WO200232461-A2.
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Human Protein C zymogen protein
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                                       AAU99092 standard; protein; 419
Human Protein C zymogen protein
WO200232461-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU99091 standard; protein;
Human Protein C zymogen prot
                                                                                                                    (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
                                                                                                                                                           WO200232461-A2.
                                                                                                                                                                         AAU99075 standard; protein; 419 AA.
Human Protein C zymogen protein mutant M338N
                                                                                                                                                                                                                                           (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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7.9%;
rity 24.5%;
HOLDINGS
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zymogen protein
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24.5%;
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24.58;
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24.5%;
                                                                                           7.9%;
24.5%;
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24.5%;
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protein
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protein mutant L387N/N389S
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mutant L387N/N389T
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mutant M338A.
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No.
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No. 4.1e-09;
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No. 4.1e-09;
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No. 4.1e-09;
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No. 4.1e-09;
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No. 4.1e-09;
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No. 4.1e-09;
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No. 4.1e-09;
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4.1e-09;
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Query Match
Best Local S
RESULT 852
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RESULT
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(ELIL ) LILLY & CO ELI.
"arch "---try 24.5%;
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24-DEC-2003.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S/
                                                                                                                                                                                                                                                                                                                                                                                                            AAB82677 standard; protein; 419 AA.
Human protein C derivative (H10Q/S11G/Q32E/N33D/L194S)
WQ200157193-A2.
                                                                                                                                                                                        Coastal taipan venom protease.
WO2003082914-A1.
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Human Protein C zymogen protein
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Human Protein C zymogen protein mutant K192N/L194S
                                                                                          ABP60993 standard; protein;
Novel human protein. SEQ ID
                                                                                                                                                                                                                   ADG83830 standard; protein; 467 AA
                                                                                                                                                                                                                                                                                                                Human Protein C zymogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADM77505 standard; protein; 461 AA.
Human protein C variant #3 amino acid sequence.
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Human protein C variant #5 amino acid
                                                                                                                                                                                                                                                                         (ELIL ) LILLY & CO ELI.
                                                                                                                                                                                                                                                                                                                AAR13537 standard; protein; 460 AA.
Human Protein C zymogen N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human protein C variant
WO2003106666-A2.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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                          GLAXO GROUP
                                      SMITHKLINE BEECHAM SMITHKLINE BEECHAM
                          LTD.
                                                                                                                                  7.9%;
23.0%;
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24.5%;
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24.5%;
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24.5%;
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                                         DTG.
                                                                                             1031 AA.
80.
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Pred. No.
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Pred.
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Pred.
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Pred. No. 4.5e-09;
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Pred. No. 4.1e-09;
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Pred. No. 4.1e-09;
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Score
Pred.
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Pred. No. 4
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mutant.S250N/S252T
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No.
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No. 4
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No. 4.
312; DB 5;
No. 1e-08;
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                                                                                                                                   4.9e-09;
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.8e-09;
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            Length 1031;
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Best
RESULT
ID AA
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                                                                                                                                       Query Match
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(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S.
7.9%; S.
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AAU99057 standard; protein; 419
                                                                                         AAU99031 standard; protein; 419
Human Protein C zymogen protein
                                                                                                                                                                                                                                                          (MAXY-) MAXYGEN (MAXY-) MAXYGEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MAXY-) MAXYGEN HOLDINGS LTD.
ry Match 7.9%;
t Local Similarity 24.5%;
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(MAXY-) MAXYGEN HOLDINGS LTD.
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Human Protein C zymogen protein mutant H303N.
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                                                                                                                                                                                                   Human Protein C
                                                                                                                                                                                                                                                                                                                       AAU99044 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU99070 standard; protein; 419
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                                              (MAXY-) MAXYGEN
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NO200232461-A2.
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7.9%; (city 24.2%; )
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mutant K193N/A195T
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No. 4.7e-09;
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No. 4.7e-09;
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RESULT 876
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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S.
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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S.
                AAB82678 standard; protein; Human protein C derivative WO200157193-A2.
                                                                                                   ADM77503 standard; protein;
Human protein C variant #1;
WO2003106666-A2.
                                                                                                                                                                                Human protein C
EP443874-A.
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(ZYMO ) ZYMOGENETICS
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WO200232461-A2.
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Human Protein C zymogen prot
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Human Protein C zymogen prot
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(MAXY-) MAXYGEN HOLDINGS
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Local Similarity · 24.5%;
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protein mutant
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(H10Q/S11G/Q32E/N33D/L194S/T254S)
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mutant
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5.1e-09;
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Query Match
Best Local Similarity
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                                                        Best Local Similarity RESULT 885
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AAB82673 standard; protein;
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Truncated human protein C po
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Human protein C derivative
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Human mature wild t
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Human activated protein C-related protein
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                          AAU99063 standard; protein; 419
Human Protein C zymogen protein
WO200232461-A2.
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No. 5
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No. 5.3e-09;
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No. 5.2e-09;
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No. 5e-09;
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. 5.3e-09;
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5.2e-09;
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5e-09;
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(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S
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25-APR-2002.
25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; Sr
7.9%; Sr
7.9%; FCh
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WO200232461-A2.
                                                                              AAU99059 standard; protein; 419
Human Protein C zymogen protein
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Human Protein C zymogen protein
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                                                                     VO200232461-A2.
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Human Protein C zymogen protein mutant E307N/E309T
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Human Protein C zymogen protein
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C zymogen protein mutant K192N/L194T
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/ APS.
N HOLDINGS LTD.
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Pred. No. 5.3e-09;
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mutant S304N/R306T
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No. 5.3e-09;
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Best Local Similarity RESULT 902
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RESULT 895
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(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.9%; S.
Match 7.1ty 24.5%; F.
                                             (FARH ) HOECHST JAPAN LTD.
rry Match 7.9%;
t Local Similarity 24.5%;
          AAW25086 standard; protein;
Human protein C.
                                                                                                           AAP81104 standard; protein; Sequence of human protein C.
                                                                                                                                                                                      WO2003082914-A1.
                                                                                                                                                                                                             ADG83834 standard; protein; 453 Mainland tiger snake venom prote
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ry Match 7.9%; Score 31
L Local.Similarity 24.5%; Pred. No.
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Amino acid sequence of mature human protein
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TY Match 7.9%;
It Local Similarity 24.5%;
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WO9720043-A1.
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WO200232461-A2.
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Human Protein C zymogen protein mutant S305N/E307T
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Pred. No. 5.3e-09;
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No. 5.3e-09;
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No. 5.3e-09;
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Query Match
Best Local Similarity 24.5%;
RESULT 903
ID AAP60001 standard; protein; 4
DE Sequence of polypeptide with
PN EP191606-A.
                                                                        RESULT 910
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25-MAR-1987
25-WAR-1987
(ZYMO) ZYMOGENETICS INC.
(UNIW ) UNIV WASHINGTON.
(UNIW ) UNIV WASHINGTON.
7.9%; (
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                                             US5516650-A.
                                                                                                                                        AAR34295 standard; protein;
                                                                                                                                                                                                       Protein C precursor. WO9109951-A:
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WO9109953-A.
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Human protein C.
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EP215548-A.
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                                                                AAW02600 standard;
                                                                                                                      JP05064588-A.
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(WHED ) WHITEHEAD INST BIOMEDICAL RES.
7.9%; Score 310.
74.5%; Pred. No.
                                                                                                            AAB82676 standard; protein; Human protein C derivative W0200157193-A2.
                                                                                                                                                               27-MAI-2003.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS
7.9
                                                                                                                                                                                                                                                                                               ADM77502 standard; protein; 461 Human protein C wild-type amino WO2003106666-A2.
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Human Protein C precursor p
WO200232461-A2.
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Human wild type protein C.
WO200159084-Al.
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Human protein C derivative;
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07-OCT-1999.
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Human lecithin cholesterol a
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WO200159084-Al.
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Human Protein C zymogen FN.
AAU99020 standard; protein; 419 AA.
Human Protein C zymogen protein mutant S216N/K218T.
                                                                                       AAU99062 standard; protein; 419 AA.
Human Protein C zymogen protein mutant A310N/R312T
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Human Protein C zymogen protein
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Human Protein C zymogen protein
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Human Protein C zymogen protein
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Human Protein
EP443875-A.
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Human Protein C zymogen protein
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Human Protein C zymogen protein mutant K308N/A310T
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Human Protein C zymogen protein mutant S216N/K218S
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                   AR13540 standard; protein; 461
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No. 6e-09;
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Best Loc.
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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%; Sr
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25-APR-2002.
25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%; Sc
7.8%; Sc
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7.8%; P
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Human protein C derivative #1.
WO200159084-A1.
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AAU99036 standard; protein; 419 AA
                                                                                    Human Protein C
WO200232461-A2.
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Human Protein C zymogen protein mutant
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Human Protein C zymogen protein mutant A310N/R312S
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Human Protein C zymogen protein mut
WO200232461-A2.
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Human protein C derivative #3.
WO200159084-A1.
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                                                                                              AAU99086 standard; protein; 419 AA.
Human Protein C zymogen protein mutant
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                                               (MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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(ELIL ) LILLY & CO ELI.
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LILLY & CO ELI.
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Pred. No. 6.4e-09;
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No. 6.8e-09;
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No. 1.1e-08;
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No. 6.5e-09;
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No. 6.8e-09;
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                                    Best Local Similarity RESULT 953
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(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%; S.
7.8%; S.
24.5%; F
                                                                                                                                                25-APR-2004.

(MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.

7.8%; S
7.8%; S
                                                                                                                                                                                                                                                        (MAXY-) MAXYGEN APS. NGS LTD. (MAXY-) MAXYGEN HOLDINGS LTD. (MAXY-) 8%; S/ 7.8%; S/ 7.4%; P
                                                                                                                                                                                                                                                                                                                                                                                                                       Human protein C WO200159084-A1.
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Human Protein C zymogen protein mutant R352N/D354T
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Human protein C derivative !
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           AAU99093 standard; protein; 419 AA.
Human Protein C zymogen protein mutant
                                                                                                         Human Protein C zymogen
WO200232461-A2.
                                                                                                                    AAU99046 standard; protein; 419 AA.
Human Protein C zymogen protein mutant
                                                                                                                                                                                                                             AAU99021 standard; protein; 419 AA.
Human Protein C zymogen protein mutant K217N/L219S
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Human Protein (
WO200232461-A2
                                                                     (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
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(MAXY-) MAXYGEN HOLDINGS LTD.
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protein
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mutant Y302N
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No. 7.7e-09;
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No. 6.8e-09;
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No.
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. 7.7e-09;
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MOZOVEZ
25-APR-2002.
25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%; S
7.8%; S
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25-APR-2002.
(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%; S/
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Human protein C zymogen Q313.
EP443874-A.
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(MAXY-) MAXYGEN HOLDINGS LTD.
7.8%;
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Human diagnostic and therapeutic pprotein
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WO200232461-A2.
                                      Human protein
EP443874-A.
                                             AAR13582 standard; protein; 461 AA
Human protein C zymogen Q097.
                                                                                                                                                          AAU99073 ståndard; protein; 419
Human Protein C zymogen protein
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Human Protein C zymogen prot
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(MAXY-) MAXYGEN HOLDINGS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                  BLIL ) LILLY & CO BLI.
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              S
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HOLDINGS LTD.
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24.1%;
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24.7%;
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24.4%;
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24.8%;
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 . 78;
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Pred.
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Pred.
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 Score 304.5;
                                                                                                                                                                                                                                                                                                          Score 306.5; DB Pred. No. 1e-08;
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                                                                                                                                                           AA.
mutant V339S.
                                                                                                                                                                                                                                                                    AA.
mutant D172N/K174T
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mutant D172N/K174S
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No. 9.5e-09;
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Length 461;
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Best Local Similarity RESULT 962
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(MAXY-) MAXYGEN APS.
(MAXY-) MAXYGEN HOLDINGS LTD.
7.6%; Sr
                                                                                                                                                                                                                                                                    Hybrid protein of protein-C EP296413-A.
                                                                                                                                                                                                                          (FARH) HOECHST JAPAN LTD.
PRY Match 7.6%;
St Local Similarity 24.7%;
                                                                                                                                                                                                                                                                                                                                              (MAXY-) MAXYGEN (MAXY-) MAXYGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU99027 standard; protein; 419
Human Protein C zymogen protein
WO200232461-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MAXY-) MAXYGEN (MAXY-) MAXYGEN
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(MAXY-) MAXYGEN HOLDINGS
AAU99030 standard; protein; 419 AA
                                                                                      AAU99029 standard; protein; 419 AA.
Human Protein C zymogen protein mutant
                                                                                                                                             (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.
                                                                                                                                                                                                                                                                                                                                                                               Human Protein C zymogen protein mutant WO200232461-A2.
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                                                                                                                                                                                  WO200232461-A2.
                                                                                                                                                                                          AAU99041 standard; protein;
Human Protein C zymogen prot
                                                                                                                                                                                                       AAU99041 standard;
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Human Protein C zymogen protein mutant
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                                                                              VO200232461-A2.
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rity 24.4%; 1
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HOLDINGS LTD.
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7.7%;
24.4%;
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mogen protein mutant T253N/D255S
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24.5%;
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24.4%;
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24.2%;
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protein
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and Factor-X.
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mutant D255N/D257S
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No. 1.
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No. 1.8e-08;
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No.
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No. 1.2e-08;
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No. 1.6e-08;
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                                                                                          V245N/P247S
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.4e-08;
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BESULT 971
         RESULT
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Best Local
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(MAXY-) MAXYGEN HOLDINGS

7.6
                                                                                                                                                                                                                             Trypsin-like serine protease
US2003170630-A1.
                                                                                                                                                                                                                                                                                           ADI17276 standard; protein; Polypeptide homologous to a WO200268649-A2.
                                                                                                                                                                                                                                                                                                                                                          Polypeptide homologous to WO200268649-A2.
                                                                                                                                                                                                                                                                                                                                                                            ADI17268 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200232461-A2.
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WO200232461-A2.
                                                                                                                                                                                                                                             ADJ83075 standard; protein;
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(REAS-) RES ASSOC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MAXY-) MAXYGEN HOLDINGS
7.6
                                                                                        GORM
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                                              FERNANDES E R.
RIEGER D K.
EDINGER S R.
GUNTHER E.
                                                                                            CASMAN S J.
BOLDOG F L.
                                                                                                                     SHIMKETS R A.
GROSSE W M.
SZEKERES E S.
VERNET C A M.
                                                                                                                                                     SPYTEK K A.
ZERHUSEN B D.
PATTURAJAN M.
LEPLEY D M.
BURGESS C E.
        MACDOUGALL J
SMITHSON G.
                                                                                                                                                                                                      TCHERNEV V T.
                                                                                                                                                                                                                                                                                                                                            CURAGEN CORP.
                                                                              GORMAN L.
GANGOLLI E A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C zymogen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein;
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7.6%;
24.4%;
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24.2%;
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32.3%;
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24.1%;
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32.3%;
7.5%;
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human NOVX
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Score
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mutant D255N/D257T.
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No. 1
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No. 1.
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296;
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2.3e-08;
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.8e-08;
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Query Match
Best Local S
RESULT 984
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RESULT
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RESULT 978
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RESULT 979
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Sequence of tissue p
Thr 68, Gln 117).
WO8912681-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WOBSTACE
28-DEC-189.
28-DEC-189.
(BRBI-) BRIT BIO-TECHN LTD.
(BRBI-) T.5%;
ery Match 7.5%;
23.3%;
                                                                                                                                                                                                                                                                                                                                                        US5385732-A.
31-JAN-1995.
                                                                                                                                                                                                                                                                                                                                                                           AAR70895 standard;
Human t-PA variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human t-PA variant US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human diagnostic WO200175067-A2.
                            AAR13921 standard; protein; Delta (466-470) tPA variant WO9113149-A.
                                                                                                              Human myocardial WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                          31-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABG21442 standard; protein;
                                                                                                                                                                                                         Tumour-associated antigenic
                                                                                                                                                                                                                  ABM80985 standard; protein;
                                                                                                                                                                                                                                                                                Antipsoriatic pr
WO2004028479-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human NOV12a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HYSE-) HYSEQ INC.
                   05-SEP-1991
                                                                                          (APPL-) APPLERA CORP.
                                                                                                                                   ADQ39246 standard; protein;
                                                                                                                                                                           (GETH ) GENENTECH INC.
                                                                                                                                                                                              WO2004030615-A2.
                                                                                                                                                                                                                                                                                                     ADN03787 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR70903 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABU12065 standard;
        (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                               (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURA-)
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976
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        GENENTECH INC.
                                                                                                                                                                                                                                                            GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ndard; protein; 986 AA. CG92293-01 protein SEQ
                                                                                                                                                                                                                                                                                       dard; protein;
protein sequer
                                                                                                                         infarction-associated
                                                                                                                                                                                                                                                                                                                                              INC.
                                                                                                                                                                                                                                                                                                                                                                            protein; 527 AA.
(N103,A331,A332).
                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 527 AA. (N103, A432, A434)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein; 562
plasminogen
                                                                                                                                                                                                                                                                                                                         7.48;
23.58;
                                                                                                                                                                                                                                                                                                                                                                                                         7.4%;
23.4%;
                                                                                                                                                                                                                                        7.4%;
23.1%;
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23.1%;
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23.1%;
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21.0%;
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23.1%;
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                                                                                                                                                                                                                                                                                        sequence #90.
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with
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target (TAT)
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Pred.
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Pred. No. 1e-07;
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activator
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#21433
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h H432A
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No.
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No. 6.8e-08;
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No. 6.7e-08;
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No. 6.8e-08;
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                                                                      .8e-08;
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.4e-08;
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Human tissue PA variant (deltal-44,N103,D184,E275,I277)
US5385732-A.
                                               ADL00357 standard;
Human tissue type !
                                                                                                                                         AAR70894 standard;
Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADG83838 standard; protein; 376 AA.
Rough scale snake venom prothrombin activator, trocarin.
                                                                                                                                                                                                                                                                                                                                                AAR70878 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,D184,E275)
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAP60614 standard; protein; 516 AA.
Plasmid pDAP3 encoded sequence.
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          19-FEB-2003.
(LIBB/) LI B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TOOY) ) TOYO SODA MFG CO LTD.
(SAGA) ) SAGAMI CHEM RES CENTRE.
(CEMG) CENTRAL GLASS CO LTD.
(HODO) ) HODOGAYA CHEM IND CO LTD.
                                                                                                                                                                                                                   GETH ) GENENTECH
                                                                                                                                                                                                                                                                                                                      GETH ) GENENTECH INC.
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NISSAN CHEMICAL INDS KK.
h 7.4%; Scc
Similarity 23.1%; Pre
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NIPPON SODA CO.
CENTRAL GLASS CO LTD.
TOYO SODA MFG CO LTD.
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human tissue plasminogen
                                                                                                                                                                                                                   INC.
                                                                                                               INC.
                                                 plasminogen
                                                                                                                                                     protein; 527 AA. (N103, A303, A304)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 564
plasminogen
                                                 protein; 520 AA.
plasminogen activator
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23.3%;
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23.3%;
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22.2%;
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Pred. No. 7.7e-08;
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(TPA) analogue.
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No. 7.
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No. 7.7e-08;
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No. 5.4e-08;
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.7e-08;
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Length 520;
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Best Local Similarity RESULT 993
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RESULT 997
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                                                                                                                                                                                     ADI10377 standard; I
Human cell surface I
WO200295007-A2.
28-NOV-2002.
                                              AAR21598 standard; protein;
tPA variant - T103N, D236A,
                                                                                                        Human transmembrane serine US2004001801-A1.
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Human cell surface
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US5106741-A.
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                                                                                                                                      ADJ46901 standard; protein;
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D238A,
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 289; DB 2;
No. 9.4e-08;
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No. 1.3
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No. 1.1e-07;
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No. 1.3e-07;
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No. 1.3e-07;
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No. 1.1e-07;
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No. 9.4e-08;
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Best Local Similarity RESULT 1010
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                                                                                                                                                                                       Novel human secreted and tra
US2003050239-A1.
                                              ABU84898 standard;
Human secreted and
                                                                                                                           ABU72218 standard; protein; 802 AA.
Novel human secreted and transmembrane
                                                                                                                                                                                                                                                                         Amino acid sequence WO200200860-A2.
                                                                                                                                                                                                                                                                                             AAU82755 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200053756-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PRO618 (UNQ354) protein; WO200053756-20
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WO9946281-A2.
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Human PRO618 protein sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB85076 standard; peptide; 296 AA.
Amino acid sequence of MASP-1 polypeptide.
WO200140451-A2.
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e of novel
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No. 1.5e-07;
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No. 9.5e-08;
 1.5e-07;
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1.5e-07;
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Human PRO618 polypeptide.
US2002169284-A1.
14-NOV-2002.
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US2003083248-A1.
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US2003049633-A1.
13-MAR-2003
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US2003045462-A1.
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13-MAR-2003.
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                                                               US2003054986-A1.
                                                                        ADC43817 standard; protein; l
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                    Score 288.5; DB 7; Pred. No. 1.5e-07;
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Human secreted/transmembrane
US2003073131-A1.
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US2003072745-A1.
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US2003073624-A1.
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05-JUN-2003.
(GETH ) GENENTEC
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16-OCT-2003.
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30-OCT-2003.
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22-MAY-2003.
         ADG60086 standard; protein; 802
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Best Local Similarity
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DE Human secreted/trans
PN US2003077700-A1.
PD 24-APR-2003.
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ADF45732 standard; protein; E
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ADF25229 standard; protein; E
Human secreted/transmembrane
US2003211092-A1.
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No. 1.5e-07;
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No.
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No. 1.5e-07;
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No. 1.5e-07;
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No. 1.5e-07;
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No. 1.5e-07;
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                                                                                                                                                                                                            .5; DB 8;
1.5e-07;
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Query Mat
Best Loca
RESULT 1071
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                                                                                                                                                                                                    Best Local Similarity
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RESULT 1064
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Best Local Similarity
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Human neurotrimin h
EP1386931-A1.
04-FEB-2004.
                                                                                    Mouse epithilin-like serine WO200196378-A2.
                 Murine type II 1
W0200212461-A2.
                                                                                                                                                                       Murine epithin.
WO200129056-A1.
                                                                                                                                                                                         AAB98507 standard;
                                                                                                                                                                                                                                                  Human PRO618 protein
AU2002317529-A1.
                                                                                                                                                                                                                                                                                                                            Human secreted/transmembrane US2004063921-A1.
                                                                                                                                                                                                                                                                                                                                                                                                         Human secreted/transmembrane US2004048332-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human secreted/transmembrane US2004006219-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADG58910 standard; protein;
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                                                                                                                                                                                                                                 (GETH )
                                                                                                                                                                                                                                                                      ADT91615 standard; protein;
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                                    AAU77549 standard;
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22.7%;
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protease.
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No. 1.5e-07;
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No. 1.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein sequence
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1.5e-07;
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                                                                                                                                   1.5; DB 4
1.7e-07;
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1.5e-07;
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1.7e-07;
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Best Local Similarity 23.6%; RESULT 1073
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RESULT 1075
PA BR ED
                                                         RESULT 1080
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RESULT 1077
                                                                                                                                                                             Query Match
          Human protein (
WO9950454-A2.
07-OCT-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR20219 standard; protein; 527 AA. t-PA analogue expressed by pCDM8-011. pp03285680-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR20220 standard; protein; t-PA analogue expressed by IJP03285680-A.
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WO9202612-A.
                                                                                                                                                                                                                                                                                                                                                                                                          AAR20217 standard; protein;
t-PA analogue expressed by I
JP03285680-A.
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                               AAY49558 standard; protein;
Human protein C protein seqn
                                                                                                                   Human t-PA variant
US5385732-A.
                                                                                                                                          AAR70904 standard;
                                                                                                                                                                                         31-JAN-1995.
(GETH ) GENENTECH INC.
                                                                                                                                                                                                                            AAR70901 standard;
Human t-PA variant
                                                                                                                                                                                                                                                                                                                        AAR20218 standard; protein; 527 AA.
t-PA analogue expressed by pCDM8-010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (YAMA ) YAMANOUCHI PHARM CO
(YAWA ) NIPPON STEEL CORP.
CY Match 7.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SUMU ) SUMITOMO SEIYAKU KK.
ry Match 7.3%;
Local Similarity 23.2%;
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CY Match 7.3%;
Local Similarity 23.2%;
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                                                                                           (GETH ) GENENTECH INC.
                                                                                                         1-JAN-1995
                                                                   Local Similarity
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Local Similarity 23.4%;
                                                                                                                                                                                                                                                                                                                                                           ocal Similarity
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7.3%;
Similarity 23.2%;
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7.3%;
h
Similarity 23.2%;
WHITEHEAD
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Q, D236A,
INST
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                                                                                                                             protein; 527 AA. (N103, A440).
                                                                                                                                                                                                                            protein; 527 AA. (N103, A416, A417, A418)
                                                                   7.3%;
23.4%;
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23.5%;
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21.4%;
BIOMEDICAL
                                ein; 356 AA.
sequence.
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/ PCDM8-009.
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; pCDM8-012.
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D238A,
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No. 1.1e-07;
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No. 1.1e-07;
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No. 1.
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No. 1.1e-07;
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No. 1.1e-07;
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No. 1.1e-07
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No. 1.1e-07;
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No. 1.7e-07;
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.1e-07;
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.1e-
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Query Match
Best Local Similarity
RESULT 1081
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                                                          Query Match
Best Local Similarity
RESULT 1089
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RESULT 1083
                                                                                                                                              Best Local Similarity
                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                           Human tissue PA variant (del US5385732-A.
                                                                                                                                                                                                                                                                                                                                                         Coastal taipan venom WO2003082914-A1. 09-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR13918 standard; protein;
Delta (466-470) tPA variant
WO9113149-A.
05-SEP-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NOVO) NOVO NORDISK AS.
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                                                                                                                                                                                                                                                                                                                                                                                      ADG83828 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PRO618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200158935-A2.
                                                                                                               Human tissue
US5385732-A.
                                                                                                                                                                                       31-JAN-1995.
                                                                                                                                                                                                           AAR70883 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,K210,E275)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABP43952 standard;
                             Human tissue
US5385732-A.
                                       AAR70886 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,S184,E275,I277)
                                                                                                                        AAR70884 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,
                                                                                                                                                                            (GETH ) GENENTECH INC.
                                                                                                                                                                                                  US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                 (HYSE-) HYSEQ INC.
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         (GETH )
                   31-JAN-1995
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        INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein; 406 AA.
K143N/N145T/R315N/V317T
                                                                                                                                                                                                                                                                                                                                                                                       protein;
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23.0%;
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23.0%;
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24.5%;
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23.4%;
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22.7%;
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23.4%;
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23.4%;
                                                                                                                                                                                                                                                                                                                                                                             protease.
                                                                                                                                                                                                                                                                                            ein; 483 AA.
(delta1-44,N103,S184,E275)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 522 A
with
                                                                                                                                                                                                                                                                                                                                                                                          467
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Pred.
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Pred.
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Score
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No.
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No. 8.9
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No.
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No.
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1.7e-07;
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. 1.1e-07;
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7.5
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7.9e-08;
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                                                                                                                          E275, I277)
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.9e-08;
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.9e-08;
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.le-07;
DB
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Length 483;
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Human tissue PA variant (deltal-44,N103,K213,E275)
US5385732-A.
                                                                                                                                                                                                                                                                                                                                              AAR70888 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,R210,A211,R212,R213,E275,I277)
US5385732-A.
                                                           AAR70907 standard;
Human t-PA variant
                                                                                                                                                                                                                                             AAR70890 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,K210,E275,I277).
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human tissue
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR70882 standard; protein;
Human tissue PA variant (de
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Human tissue PA variant (de)
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Human tissue PA variant (deltal-44,N103,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human tissue
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR70881 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N103,R210,A211,R212,R213,E275).
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PA variant (deltal-44,N103,E275)
                                                                                                                       INC.
                                                                                                                                                                                                                                                                                                                       INC.
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                                                        protein; 527 AA.
(N103,A460,A462)
                                                                                                                                                                                              7.3%;
23.4%;
                                                                                                                                                                                                                                                                                             7.3%;
23.1%;
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23.4%;
7.3%;
23.4%;
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23.4%;
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23.4%;
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(delta1-44,N103,R252,E275)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ein; 483 AA.
(delta1-44,N103,K213,E275,I277)
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No. 1.
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No. 1.
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No. 1
287; DB 2;
No. 1.2e-07;
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No. 1.1e-07;
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No. 1.1e-07;
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No. 1.1e-07;
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.1e-07;
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RESULT 1099.
ID AAR7087
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PD 31-JAN-
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                                 Best Local Similarity RESULT 1107
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AAR44812 standard; protein;
Human tPA variant N103.
US5270198-A.
                                                                                      AAR44816 standard; protein;
Human tPA variant (N67,N103)
US5270198-A.
                                                                                                                                                                   AAR14486 standard; protein;
Delta (466-470) tPA variant
WO9113149-A.
05-SEP-1991.
                                                                                                                                                                                                                                                                    Brown snake venom WO2003082914-A1.
                                                                                                                                                                                                                                                                             ADG83826 standard; protein;
Brown snake venom protease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human factor VII polypeptide mutant K143N/ N145T W02004000336-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR70874 standard;
                                                                                                                                                                                                                                                                                                                                     (MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS
                                                                                                                                                                                                                                                                                                                                                                                 Human factor VII/VIIa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM52182 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human t-PA variant
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                                                                                                                                                                                                                                                                                                                                                                        WO2004029091-A2.
                                                                                                                                                                                                                                                                                                                                                                                            ADO10589 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200158935-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human FVII mutant
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                                                                                                                                                                                                                                                                                                                                                                                                                              (NOVO ) NOVO NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MAXY-) MAXYGEN APS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; protein; 406 AA.
K143N/N145T.
                                                                                                                                                                                                                        7.3%;
22.2%;
                                                                                                                                                                                                                                                                                                               7.3%;
23.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein; 527 AA. (N103, A283, A287)
                                                                                                                                 7.3%;
22.7%;
                                          7.2%;
23.2%;
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23.4%;
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23.0%;
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23.4%;
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23.0%;
                                                                                                                                                                                                                                                                                                                                                                                 protein mutant
                                                                                                                                                                                         522 AA.
with Y67N
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                                                                                                           527 AA
                                                                                                                                                                                                                                                                                                                                                                                              406 AA
                       527
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Pred.
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                                            Score 286;
Pred. No. 1.
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No. 1.
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No. 1.:
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No. 1e
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No. 1e-07;
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No. 1e-07;
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                                                                                                                                              522;
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Local Similarity

7.2**%**; 23.2**%**;

Score Pred.

286; DB 2; No. 1.4e-07;

Length

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Match
Match
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RESULT 1116
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RESULT 1114
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BBBB
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Query Match 7.2%;
Best Local Similarity 23.3%;
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Best Local (
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08-OCT-1987.
(CREA/) CREA R.
                                                                                                                                                                                                Thrombolytic proteins 1-9-1-11 having or replaced and containing a modified WO8704722-A.

13-ANG-1-0--
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR09289 standard;
Sequence of tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence encoded activator (tPA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR09220 standard; protein; 529 AA.
t-PA insertion variant i304H, i305H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR70900 standard; protein; 527 AA.
Human t-PA variant (N103,A410).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR70860 standard; protein; 527 AA.
Human t-PA variant (N67,A331,A332).
               Sequence of tissue WO8911531-A.
                                                             AAP91683 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T-PA with -ve charged finger and/or kringle JP03061483-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR12342 standard; protein; 561 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAP70449 standard; protein;
Sequence encoded by of synth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5385732-A.
31-JAN-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (FUJI ) FUJISAWA PHARM CO LTD.
                                                                                                                                            (GEMY ) GENETICS
(LARS/) LARSEN G
                                                                                                                                                                                                                                                                                                                                                                                                                708912681-A.
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t-PA variant
                                                                                                                                              INST INC.
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(N67, A432,
                                    protein; 527 AA.
plasminogen activator (tPA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein; 562 AA.
plasminogen activator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7.2%;
23.2%;
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22.1%;
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23.1%;
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23.4%;
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22.9%;
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synthetic ge
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2,A434).
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Pred. No. 1.5e-07;
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No. 1.4e-07;
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No. 1.4e-07;
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No.
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. 1.4e-07;
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                                                                                                          <u>–</u> 55
                                                                                                        ; DB 1;
.5e-07;
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.4e-07;
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Best Local Similarity RESULT 1120
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RESULT 1117
                             Best Local
RESULT 1125
                                                                                                            Best Local Similarity
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                                                                                                                                                                                                                                                                                                                      Human serine protease BSSP5 WO200031243-A1.
                                                                              ABM82817 standard; protein; 629 AA. Human diagnostic and therapeutic pprotein WO2004023973-A2.
                                                                                                                                                                Human diagnostic WO2004023973-A2.
                                                                                                                                                                                                                                             AAP91961 standard; protein; 518 AA. Sequence of des 1-44E275 t-PA mutant. W08909266-A.
                                                                                                                                                                                                                                                                                                                                                                                                               T-PA variant of JP03061482-A.
                                                                                                                                                                                                                                                                                                                                                                                                                        AAR13148 standard; protein; 556
T-PA variant contg. fibronectin
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23-SEP-1987
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22-MAR-1990.
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t-PA variant H432A, R434A.
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WO9002798-A.
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t-PA variant H331A,
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                   AAR70851 standard;
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Human tissue
US5385732-A.
                                                          (INCY-) INCYTE CORP.
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h 7.2%;
Similarity 28.0%;
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          PA variant
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19.5%;
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2%; Score 285; I
9%; Pred. No. 1.(
          in; 483 AA.
(delta1-44,N67,D184,E275,I277).
                                                                                                                                                                                                                                                                                                                                         264 AA.
(hBSSP5)
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No. 1.6e-07;
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1.5e-07;
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.9e-07;
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RESULT 1127
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31-JAN-1995.
(GETH) GENENTECH INC.
(GETH) 7.2%; f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR70908 standard;
Human t-PA variant
US5385732-A.
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Human tissue PA variant (de:
                             AAR23807 standard;
t-PA (Tyr 297) mute
                                                                                                     Sequence of tissue WO8912681-A.
                                                                                                                                                                                                Sequence of tissue WO8703906-A.
                                                                                                                                                                                                                                                                                                                                                                    AAR70893 standard; protein; 527 AA.
Human t-PA variant (N103,A296,A297,A298,A299)
US5385732-A.
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Human tPA variant (N65, S67).
US5270198-A.
                                                                                                                                                                                                         AAP70474 standard; protein; 562 AA.
Sequence of tissue plasminogen (TPA)
                                                                                                                                                                                                                                                                                             AAR70891 standard;
Human t-PA variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human t-PA variant
US5385732-A.
                                                                                                                          AAR09286 standard;
                                                                                                                                                               (UPJO ) UPJOHN CO.
(MARO/) MAROTTI K R.
                                                                                                                                                                                                                                                                                                                                               (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR70859 standard;
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                                                                              (BRBI-) BRIT BIO-TECHN LTD.
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UNIV TEXAS SYSTEM
                            ard; protein; mutant.
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                                                                                                              protein; 562 AA.
plasminogen activator analogue
                                                                                                                                                                                                                                                                                             protein; 527 (N103, A267).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein; 527 AA
(N67,A303,A304)
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23.5%;
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23.8%;
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(delta1-44,N67,D184,E275)
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No. 1
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No. 1.9e-07;
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.8e-07;
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.6e-07;
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Best Local Similarity
RESULT 1143
ID AAR44810 standard; p
DE Human tPA variant (N
PN US5270198-A.
PD 14-DEC-1993.
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Best Local Similarity
RESULT 1135
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RESULT 1136
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ery Match 7.2%;
st Local Similarity 22.7%;
                                                                                                               AAR09269 standard; protein;
t-PA variant E303A, R304A.
                                                                                                                                                                                                      AAR09257 standard; protein;
t-PA variant d1-44, N184D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE83543 standard; protein; Rat Protein NP 058839, SEQ WO2003016475-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ55852 standard; protein; Human factor VII polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABG73125 standard; protein; 406 AA.
Human coagulation Factor VII mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB80068 standard;
                                                                                                                                                                                              WO9002798-A.
                                                                                                                                                                                                                                                                                                Tissue plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEHO ) GEN HOSPIT
(FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NOVO )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human coagulation WO200277218-A1.
                                                                                                                                                                                                                                                                                                            AAP90169 standard;
                                                                                                                                                                                                                                                                                                                                                                                WO9113149-A.
                                                                                                                                                                                                                                                                                                                                                                                                      AAR13917 standard; peptide;
Delta (466-470) tPA variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004000366-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200183725-A1.
                                 AR44810 standard; protein;
                                                                                                                                                                                                                                                                         10-AUG-1989
                                                                                                                                                                                                                                                                                                                                                                    05-SEP-1991
                                                                                                                                                                                                                                                                                                                                                                                           substitutions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-FEB-2003
                                                                                                                                                                                                                                                                                                                                 Local Similarity
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                                                                                                                                                                                                                                                                                                                                              Match
                                                                              GENENTECH INC.
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                                                                                                                                                                                                                                                               GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 406 AA. factor VII mutant L305V/M306D/D309S
                                                                                                                                                                                                                                                                                                peptide; 5 activator
                                                                                                                                                                                                                                         7.2%;
22.4%;
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22.8%;
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22.7%;
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23.2%;
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22.7%;
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23.2%;
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                                                                                                                                                                                                      I210R, G211A, K212R,
                                                                                                                                                                                                                                                                                                571 AA.
or mutant
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e mutant
                                 527 AA
                                                                                                                          527 AA
                                                                                                                                                                                                                  483 AA.
                                                                                                                                                                                                                                                                                                                                                                                                      522 AA.
with K296A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           482 AA.
ID NO 11161.
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Pred. No. 1.7e-07;
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No.
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No. 1.9e-07;
                                                       283; DB 2;
No. 2e-07;
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2e-
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تن ب
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                                                                                                                                                 DB 2;
.8e-07;
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.5e-07;
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.5e-07;
                                                                                                                                                                                                                                          DB
07;
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                                                                                                                                                                                                       V213R, T252R,
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RESULT 1152
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RESULT 1150
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Human tPA variant
US5270198-A.
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Human t-PA variant
US5385732-A.
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Human tPA variant (N105, T107).
                             AAR09230 standard; protein; 525 AA
t-PA deletion variant d297-298.
                                                                                                                       AAR09254 standard; protein; 483 AA.
t-PA variant d1-44, I210R, G211H, K212Q, V213K,
                                                                                                                                                                                                                                                                                                         AAR09231 standard; protein; 524 AA.
t-PA deletion variant d297-299.
                                                                                                                                                                                                                                                                                                                                                                                      T-PA with -ve charged finger JP03061483-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR12341 standard; protein; 560 AA.
T-PA variant contg. fibronectin for thrombosis
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                                                                                                                                                                                                                                                                                                                                                                                                             AR12367 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FUJI ) FUJISAWA PHARM CO LTD
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2h 7.2%;
Similarity 22.1%;
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(N67, A296,
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23.6%;
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ged finger and/or kringle
                                                                                                                                                                                                                protein; 483 AA.
N184D, F305H.
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22.9%;
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22.1%;
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1%; Score
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,A297,A298,A299)
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No. 2e-07;
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No. 2.
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No. 2.1e-07;
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GENENTECH INC

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Query Match
Best Local Similarity
RESULT 1153
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Human t-PA variant US5385732-A.
31-JAN-1995.
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WO9002798-A.
                                                                                                                                                                                                                                                                                                                                                  AAR70869 standard;
Human t-PA variant
US5385732-A.
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US5385732-A.
31-JAN-1995.
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t-PA variant I210R, G211H, K212Q,
AAR23810 standard; protein; t-PA (Gly 301) mutant. WO9206203-A.
                                                                                    t-PA (Glu 298)
WO9206203-A.
                                                                                                                                                                    AAR09287 standard;
Sequence of tissue
WO8912681-A.
                                                                                                                                                                                                                                                                          AAP82582 standard;
Tissue plasminogen
                                                                                               AAR23808 standard; protein;
t-PA (Glu 298) mutant.
                                                              (TEXA ) UNIV
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                                                                          16-APR-1992
                                                                                                                                                  (BRBI-) BRIT BIO-TECHN LTD.
                                                                                                                                                                                                                                   (EISA ) EISAI CO LTD.
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                                         S SYSTEM.
7.1%;
23.5%;
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                                                                                                                                                                               protein; 562 AA.
plasminogen activator
                                                                                                                                                                                                                                                                                                                                                              protein; 527 AA. (N67, A440).
                                                                                                                                                                                                                                                                                                                                                                                              7.1%;
23.4%;
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(N103,A426,A427,A429,A430)
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.4e-07;
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Human coagulation wO2003037932-A2.
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                                                ADJ55926 standard;
                                                                                                         Human coagulation WO2003037932-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human FVII mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM52185 standard;
                                                                                                                                               NOVO ) NOVO NORDISK AS.

Y Match 7.1%;
Local Similarity 22.5%;
                                                                                                                                                                                                                              (NOVO ) NOVO NORDISK AS.

CY Match 7.1%;
Local Similarity 22.5%;
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TY Match 7.1%;
Local Similarity 22.5%;
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ry Match 7.1%;
Local Similarity 22.5%;
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                                                            Local Similarity
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  NORDISK AS.
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                                      d; protein; '
polypeptide
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factor VII
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lant factor VII (FVII-30).
                                                                                                                                                                                                             protein;
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7.1%;
22.5%;
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22.8%; Pred. No. 1.9e
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22.5%;
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e mutant
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No. 1.9e-07;
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No. 2.4e-07;
 281.5;
                                      V158T/ M298Q/
                                                                                                                                                                                                                                                                                (K316Q/L305V/K337A/M298Q)
                                                                                                                    (K316Q/L305V/V158D/K337A/M298Q)
                                                                                                                                                                                                  (S314E/L305V/K337A/M298Q)
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1.9e-07;
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                                       S314E/
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RESULT 1175
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RESULT
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RESULT 1177
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RESULT 1173
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RESULT
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                                                                                                                                       Best Local Similarity
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                                   Human factor VII polypeptide WO2004000366-A1.
                                                                                                           ADJ56033 standard; protein; Human factor VII polypeptide WO2004000366-A1.
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Human factor VII po
WO2004000366-A1.
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                                                      ADJ56076 standard;
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WO2004000366-A1.
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Human factor VII protein mul
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Human factor VII protein mutant
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ry Match 7.1%;
t Local Similarity 22.5%;
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No.
281.5; DB 8;
No. 1.9e-07;
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No. 1.9e-07;
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Query Match
Best Local Similarity
RESULT 1188
ID AAR70855 standard; p
DE Human tissue PA vari
PN US5386732-A.
PD 31-JAN-1995.
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ID AI
DE HI
PN WC
PD 08
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OB-APR-2004.

OB-APR-2004.

(MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.

7.1%; S.

7.1%; S.
вцапdard; protein; 483 AA.
Human tissue PA variant (deltal-44,N67,K210,E275,I277).
US5385732-A.
31-JAN-1995.
                                                                                               t-PA variant
WO9002798-A.
                                                                                                                   AAR09249 standard;
                                                                                                                                                                                      AAR12366 standard; protein; 562 AA.
T-PA with -ve charged finger and/or kringle
                                                                                                                                                                                                                                                           AAR09239 standard; protein;
t-pA deletion variant d300-
WO9002798-A.
                                                                                                                                                                                                                                                                                                                                                     substitutions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR09233 standard; protein; 522 AA.
t-PA deletion variant d297-301.
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Human factor VII/VIIa protein mutan
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                                                                         (GETH ) GENENTECH INC.
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MAXY-) MAXYGEN APS.
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1990.
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7.1%; 5
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                                                                                                                                     PHARM CO LTD.
7.1%; Score
ty 21.9%; Pred.
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A variant
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, I210R, G211A, K212R,
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d300-302.
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No. 1.9e-07;
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. 1.9e-07;
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2.4e-07;
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2.5e-07;
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2.4e-07;
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Best Local Similarity
RESULT 1189
ID AAR70845 standard;
                                         Best Local Similarity RESULT 1197
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Best Local Similarity
RESULT 1195
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Best Local Similarity
RESULT 1192
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RESULT 1191
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US5385732-A.
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US5385732-A.
         Human tissue
US5385732-A.
                                                                                     31-JAN-1995
                                                                                                Human tissue
US5385732-A.
                                                                                                           AAR70850 standard; protein; 483 AA.
Human tissue PA variant (delta1-44,N67,E275,I277)
                                                                                                                                                                                                                                                                                                                                                                                AAR70843 standard; protein;
Human tissue PA variant (dei
                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JAN-1995
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US5385732-A.
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                                AAR70852 standard;
                                                                            (GETH )
                                                                                                                                                                                                 AAR79144 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N67,
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                                                                                                                                                                                                                                                                                          AAR70846 standard; protein; 483 AA.
Human tissue PA variant (deltal-44,N67,K213,E275)
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31-JAN-1995
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                    ndard; protein; 483 AA.
PA variant (delta1-44,N67,K213,E275,I277).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ndard; protein; 483 AA.
PA variant (delta1-44,N67,R252,E275,I277)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ndard; protein;
PA variant (del
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(delta1-44,N67,E275).
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(deltal-44,N67,
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(deltal-44,N67,S184,E275)
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RESULT 1205
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                                     AAR09238 standard; protein; 525
t-PA deletion variant d300-301.
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Serine protease for fusion [
                                                                                                                                                                                                                                                                   Human Factor X protein. WO9838318-A1.
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Human tissue PA variant (del
                                                                                                         Serine protease for WO9418227-A2.
                                                                                                                                                                                    Human factor X protein WO200110896-A2.
                                                                                                                                                                                              AAB70411 standard; protein; 488
Human factor X protein sequence
                                                                                                                                                                                                                                                                                       AAW76218 standard; protein;
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Human Factor X protein analo
WO9838317-A1.
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          GENENTECH
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22.5%;
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ה analogue.
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(delta1-44,N67,R210,A211,R212,R213,E275).
                                                                                                                 protein
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2.4e-07;
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2.4e-07;
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Best Local Similarity RESULT 1210
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Query Match
Best Local Similarity
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                                                                                                           Human t-PA variant US5385732-A. 31-JAN-1995.
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31-JAN-1995.
                                                                                                                                                                                                                                                                                                                                                                            AAR70857 standard; protein; 527 AA.
Human t-PA variant (N67,A283,A287).
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Human t-PA variant (N60,N67,
                                      Wild type tissue
US5385732-A.
                                                                                                                               AAR70872 standard; protein; 527 AA
Human t-PA variant (N67,A460,A462)
                                                                                                                                                                                                  Human t-PA variant
US5385732-A.
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Human t-PA variant (N103,A364,A365,A366)
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                                                            AAR70842 standard;
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                                                d; protein; !
plasminogen
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23.0%;
                                                                                                                                                                                                             protein; 527 AA. (N103, A449, A453)
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Query Match
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RESULT 1220
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                                                                                                                                                                                                                                                                                                                                                     Human diagnostic and therapeutic WO2004023973-A2.
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                                                                                                                      Human coagulation WO2003037932-A2.
                                                                                                                                                                                                  AAO30604 standard;
Human coagulation i
WO2003037932-A2.
                                                                                                                                                                                                                                                                               AAO30575 standard; protein; Human coagulation factor VII WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour-associated WO2004030615-A2.
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AAR13150 standard;
                                                           AAO30594 standard;
                                                                                                                                         AAO30577 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABM81778 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BEEC ) BEECHAM GROUP PLC.
ry Match 7.1%;
t Local Similarity 22.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR13152 standard; protein; 559 AA.
                                                                                                                                                                               (NOVO ) NOVO NORDISK
                                                                                                                                                                                                                                                             (NOVO ) NOVO NORDISK
                                                                                                                                                                                                                                                                                                                                          (INCY-) INCYTE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (FUJI ) FUJISAWA PHARM CO LTD.
                                                                                                  (NOVO ) NOVO NORDISK
                                                                                                                                                                                                                                                                                                                                                                                                                        GETH ) GENENTECH INC.
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Similarity 23.0%;
                    NOVO NORDISK AS
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7.1%;
22.5%;
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I variant
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target
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r and/or kringle domain
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                                                                                                                                                                                                                                                                                          (S314E/L305V/V158D/M298Q)
                                                (K316H/L305V/K337A/M298Q)
                                                                                                                              (S314E/L305V/V158T/M298Q)
                                                                                                                                                                                                            (K316H/L305V/V158T/K337A/M298Q)
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.5; DB 6;
2.1e-07;
                                                                              .5; DB 6;
2.1e-07;
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2.1e-07;
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2.1e-07;
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5e-07;
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.7e-07;
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Best Local Similarity
RESULT 1234
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Best Local Similarity
RESULT 1232
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RESULT 1230
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(NOVO) NOVO NORDISK AS.
(Ty Match 7.1%;
)t Local Similarity 22.5%;
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(YY Match 7.1%;
It Local Similarity 22.5%;
                                                                                                                                             ADJ56047 standard; protein; Human factor VII polypeptide WO2004000366-A1.
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ry Match 7.1%;
t Local Similarity 22.5%;
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ry Match 7.1%;
t Local Similarity 22.5%;
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                                                              WO2004000366-A1.
                                                                                 ADJ55949 standard;
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No. 2.1e-07;
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No.
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No.
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No. 2.1e-07;
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                                                                        V158D/
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2.1e-07;
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.1e-07;
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RESULT
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ID AL
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PD 31
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                                                                                                 Best Local Similarity RESULT 1242
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                    RESULT 1243
                                                                                                                     Query
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Human factor VII polypeptide mutant F374Y/ L305V/
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WO2004000366-A1.
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WO2004000366-A1.
 ADJ55919 standard;
Human factor VII po
                                                                                         ADJ56046 standard; protein;
                                                                                                           (NOVO) NOVO NORDISK AS.
ry Match 7.1%;
t Local Similarity 22.5%;
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Human factor VII polypeptid
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CY Match 7.1%;
C Local Similarity 22.5%;
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CY Match 7.1%;
Local Similarity 22.5%;
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CY Match 7.1%;
Local Similarity 22.5%;
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Ty Match 7.1%;
Local Similarity 22.5%;
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ilarity 22.5%;
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l; protein; 406 AA.
polypeptide mutant V158D/ M298Q/ L305V/ S314E
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No.
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No. 2.1e-07;
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                                                                                F374Y/
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RESULT 1248
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RESULT 1246
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Best Local Similarity
RESULT 1244
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31-DEC-2003.
(NOVO) NOVO NOI
                                                            AAP70020 standard;
Sequence of tissue
EP242836-A.
                                                                                                                                                                                                                                                                                                                                                                                                                           Human factor VII polypeptide WO2004000366-A1.
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Human factor VII polypeptide
WO2004000366-A1.
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Human factor VII polypeptide
WO2004000366-A1.
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t-PA deletion variant d297.
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22-MAR-1990.
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standard; protein;
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HOLDINGS
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plasminogen a
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Score 280.
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No. 2.1e-07;
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No. 2.7e-07;
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t-PA variant D460A,
WO9002798-A.
                                       EP445464-A
                                                AAR13911 standard;
T-PA deriv. (II).
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t-PA deletion variant d297,
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Human factor X variant.
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(KANF) KANEGAFUCHI KAGAKU KOGYO KK.

(KANF) KANEGAFUCHI KAGAKU KOGYO KK.

7.1%; Score 280;

ry Match
7.1%; Pred. No.:
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'Y Match 7.
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R462E t-PA analogue.
JP03285680-A.
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t-PA analogue expressed by I
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WO9202612-A.
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                                                             t-PA analogue
JP03285680-A.
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                                                                                                                                                                                                       Best Local Similarity RESULT 1277
                                                                                                                Best Local Similarity RESULT 1278
                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                            MO2002-
06-JUN-2002.
(ISIS-) ISIS INNOVATION LTD.
7.1%;
ary Match 7.1%;13rity 23.0%;
                                                                                                                                                                    AAE25044 standard; protein; 527 AA. Human tissue plasminogen activator WO200240650-A2.
                                                                                                                                                                                                                                                                        AAG79362 standard; protein; 527 AA.
Human tissue plasminogen activator.
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW45907 standard;
Single chain form o
WO9802454-A2.
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Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                              AAE24190 standard; protein; 527 AA.
Human tissue plasminogen activator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW57778 standard; protein; 527 AA.
R275E,H417D human tissue-type plasminogen
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US5270198-A.
                                                                                         Alteplase protein
                                                                                                     ADL92126 standard;
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(GETH ) GENENTECH
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                                                                                                                                                                                                                                                                                                         (BOEH ) BOEHRINGER INGELHEIM INT GMBH.
ry Match 7.1%; Score 280;
Local Similarity 23.0%; Pred. No. :
                                                                                                                                                                                                                                                                                                                                                      VO200240696-A2.
                                                        (NANO-) APPLIED NANOSYSTEMS
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                                                                               )3099862-A1.
30 standard; protein; 534 AA. diagnostic and therapeutic pprotein SEQ ID NO:2879.
                                                                                                                                              BOEHRINGER INGELHEIM
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                                                                                        ; protein; sequence.
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N67.
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23.0%;
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Pred. No. 2.
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Pred.
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Pred. No. 2.
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Pred. No. 2.9e-07;
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t-PA molecule.
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No. 2.9e-07;
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                                                                                                                                                                                                                                                                                                           DB 5;
.9e-07;
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.9e-07;
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.9e-07;
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.9e-07;
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.9e-07;
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07;
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Best Local Similarity RESULT 1283
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Best Local Similarity
RESULT 1280
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25-MAR-2004.
(INCY-) INCYTE C
                                                                                                                                                                                                                                                                                                                      AAP60790 standard;
Sequence of human I
GB2173804-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human diagnostic and therapeutic WO2004023973-A2.
                                                                              AAP81913 standard; protein;
Tissue plasinogen activator
                                                                                                                                                               AAP60214 standard;
Sequence of active
                                                                                                                                                                                                                                              AAP60810 standard; protein; 562 A/
Sequence of modified human tissue
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18-MAR-1991.
(FUJI) FUJISAWA PHARM CO LTD.
7.1%; Score
23.0%; Pred.
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xry Match 7.1%; Score
t Local Similarity 23.0%; Pred.
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T-PA variant contg. fibronectin
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                                                                                                                     INTEG GENETICS INC.
                             Similarity
                                                                                                                                                                                                                 GENENTECH INC.
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                                                  BIOTECH
                                                                                                                                                                                                                                                                                                                               protein;
protein; activator
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human uterine tissue
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23.0%;
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7.1%;
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22.7%;
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22.7%;
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c encoded by
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e plasminogen
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for thrombosis
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                             280;
No.
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No. 3.
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No. 3.
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No. 2
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No. 3e-07;
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No. 3e-07;
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1.1e-07;
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.le-07;
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.1e-07;
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.9e-07;
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Query Match
Best Local Similarity
RESULT 1295
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Best Local Similarity
RESULT 1289
                                  RESULT 1296
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RESULT 1294
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Best Local
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28-DEC-1989.
(BRBI-) BRIT BIO-TECHN LTD.
7.1%;
ery Match 7.1%;
23.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAP94406 standard; protein; 562 AA.
Sequence encoded by native tPA of plasmid
EP302456-A.
                                                                                                                     AAR04701 standard; p
Sequence of tissue p
altered residue 419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAP93716 standard; protein;
Human melanoma t-PA encoded
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(NOVO) NOVO-NORDISK AS.
ry Match 7.1%;
t Local Similarity 23.0%;
                                                                                                                                                                                                                                               AAR04700 standard; protein; 562 AA.
Sequence of tissue plasminogen activator (t-PA)
with altered residues 419 and 420.
                                                                                                                                                                                                                                                                                                                                                          AAR06237 standard; protein; 562 AA.
Novel tissue plasminogen activator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR09288 standard;
Sequence of tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AARYUY16 standard; protein; 562 AA.
Human tissue plasminogen activator.
TPO1177200 %
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ry Match 7.1%; Score
t Local Similarity 23.0%; Pred.
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(NOVO) NOVO IND AS.
(EISA) EISA CO LTD.
          Native tissue
                                                                                                             EP351246-A.
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ry Match 7.1%; Score
t Local Similarity 23.0%; Pred.
EP351246-A
                     AAR04699 standard;
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         dard; protein;
plasminogen a
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plasminogen activator analogue
                                                                                                                                 protein; 562 AA.
plasminogen activator (t-PA)
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23.0%; Pred. No. 3.
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7.1%;
23.0%;
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          n; 562 AA.
activator
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No. 3.1e-07;
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No. 3.1e-07;
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No. 3.
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Best Local Similarity RESULT 1299
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RESULT 1297
                                               Best Local Similarity RESULT 1305
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T-PA67+ mutant with supernumerary N-linked oligosaccharide side chain.
US5041376-A.
20-AUG-1991.
                                                                                                            AAY50868 standard; protein; 562 AA. Human tissue plasminogen activator W09957251-A2.
                                                                                                                                                                                                                                                                                                                AAR34426 standard; protein; 562 AA.
Sequence of human pre-pro tissue plasminogen
US5200340-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR23806 standard; protein; t-PA (Glu 296) mutant.
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t-PA (Glu 296, Glu
WO9206203-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NOVO ) NOVO-NORDISK
                                                                     11-NOV-1999.
(OKLA-) OKLAHOMA MEDICAL RES FOUND.
7.1%; Score
                                                                                                                                                                                                                                                                                                                                                                 (TEXA ) UNIV TEXAS SYSTEM.
xy Match 7.1%;
t Local Similarity 23.0%;
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t-PA (Glu 304) mutant.
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(COLD-) COLD SPRING HABOR LAB.

TO 18; S

T Match
Local Similarity 23.0%; P
Human tissue plasminogen activator protein sequence
US5985607-A.
16-NOV-1999.
                                                                                                                                                                                                   US5504001-A.
02-APR-1996.
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ry Match 7.1%;
t Local Similarity 23.0%;
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ry Match 7.1%;
t Local Similarity 23.0%;
                                    AAY43397 standard;
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7.1%;
23.5%;
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298, Glu
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plasminogen activator.
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Pred. No. 3.1e-07;
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ABM80983 standard;
Tumour-associated;
                                                                   Human tPA protein
WO2004044178-A2.
                                                                                                                                                                                                                                                                                                                   Differentially expressed breast US2002156263-A1.
                                                                                                                                                                                                                                                                                                                                                                                                 Human tissue-type WO2003031464-A2.
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Human tissue-type plasminogen activator t-PA.
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                                                                                       DO28679 standard;
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ry Match 7.1%;
L Local Similarity 23.0%;
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(PPIZ ) PFIZER INC.
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LICN ) LICENTIA LTD.
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RESULT 1315
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WO2003037932-A2.
08-MAY-2003.
(NOVO ) NOVO NORDIS
                                                               Human factor VII polypeptide W02004000366-Al.
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(GETH ) GENI
Human factor VII
WO2004000366-A1.
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                                                                                                                                                                                                                                       ADJ55985 standard;
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15-JUL-2004.
     ADJ56009 standard; protein; 406 AA.
Human factor VII polypeptide mutant F374Y/ L305V/ V158D/ M298Q.
                                                                                                                                                              ADJ55941 standard;
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08-APR-2004.

08-APR-2004.

(MAXY-) MAXYGEN APS.

(MAXY-) MAXYGEN HOLDINGS LTD.

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Human factor VII/VIIa
WO2004029091-A2.
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ry Match 7.1%;
r Local Similarity 22.5%;
          t-PA insertion WO9002798-A.
                    AAR09218 standard; protein;
t-PA insertion variant i305
                                                                                                AAR09228 standard; protein;
t-PA deletion variant d304.
WO9002798-A.
                                                                                                                                                                                                                                                                                     AAR74689 standard; protein; 520 AA.
t-PA mutein (N117Q, N184Q, delta 296-302,
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(NOVO) 7.1%;
ry Match 7.1%;
t Local Similarity 22.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADJ55936 standard; protein; 406 AA.
Human factor VII polypeptide mutant M298Q/
W02004000366-A1.
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ry Match 7.1%;
Local Similarity 22.5%;
                                                                                                                                                                             22-MAR-1990
                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                          GETH ) GENENTECH INC.
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th 7.1%;
Similarity 22.5%;
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h
7.1%; Score 279.5; DB
Similarity 23.3%; Pred. No. 3e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                 protein;
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in mutant
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e mutant
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e mutant
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No. 2.4e-07;
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No. 2.4e-07;
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No. 2.4e-07;
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No.
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2.4e-07;
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3.1e-07;
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Query Match
Best Local Similarity
RESULT 1333
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RESULT 1335
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RESULT 1341
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Human ovarian cancer marker
                                                                                                                                                                                              AAR09263 standard; protein;
t-PA variant Y67N, F305H.
                                                                                                                                                                                                                                                                                                                                                                                        AAR09247 standard; protein;
t-PA variant d1-44, F305H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR09248 standard; protein;
t-PA variant d1-44, I210R, (
WO9002798-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR09250 standard; protein; 483 AA.
t-PA variant d1-44, V213K, F305H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB84871 standard; protein; 401 AA.
Mutant blood coagulant factor VII (FVII-39).
JP2001061479-A.
                                                                                                    AAR09252 standard; protein;
t-PA variant d1-44, V213K,
                                                                                                                                                                                                                                                                                           AAR09251 standard; protein; 483 AA.
t-PA variant d1-44, T252R, F305H.
                                                                                                                                                                                                                                                                                                                                                                            t-PA variant d1-44,
WO9002798-A.
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        AAR09253 standard; protein;
t-PA variant d1-44, I210K,
                                                                                                                                                                                                                                                                                 WO9002798-A.
WO9002798-A.
                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                            22-MAR-1990.
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h 7.1%; Score 279; DE
Similarity 22.8%; Pred. No. 2.5e
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23.0%;
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20.8%;
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23.0%;
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23.0%;
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23.0%;
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G211A,
           ; 483 F
F305H.
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T252R, F305H.
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OV82.
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Pred. No. 3e-07;
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No. 3e-07;
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No. 3.1e-07;
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No. 3e-07;
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No. 3e-07;
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No. 4.4e-07;
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RESULT
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t-PA variant P305 H, T, N, 1
WO9002798-A.
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t-PA variant E410A.
WO9002798-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     t-PA deletion variant
                                                                                   AAR21596 standard; protein; 527 AA.
tPA variant - E94A, D95A, N117Q.
                                                                                                                                                                        AAR09262 standard;
t-PA variant Y67N,
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR09256 standard; protein; 527 AA.
L-PA variant I210R, G211A, K212R, V213R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR06236 standard; protein; 527 AA.
Novel tissue plasminogen activator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR04186 standard; protein;
Plasminogen activator.
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(FUJI ) FUJISAWA PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EP379890-A
AAR21595 standard;
tPA variant - D95G.
                                                  O-FEB-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CIBA ) CIBA GEIGY AG.
(UCPG-) UCP GEN-PHARMA AG.
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                                                                                                                                                                          protein;
F305H.
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ant d304-305.
         protein;
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23.0%;
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22.8%;
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Best Loca.
RESULT 1359
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ESULT 1353
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                                                                                                unrombolytic protein with and containing a modified
                                                                                                  AAP71659 standard; protein; 530 AA.
Thrombolytic protein with t-PA activity where R2
and containing a modified N-linked glycosylation
                                                                                                                                                                                                                     AAP70882 standard; protein; 530 AA.
Thrombolytic protein 1-19-1-21 having t-PA
R275 is and containing a modified N-linked
                                                                                                                                                                                                                                                                                                                           AAR09219 standard; protein;
t-PA insertion variant i305
                                                                                                                                                                                                                                                                                                                                                                                                                         AAR25435 standard; protein; T-PA variant R299D.
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R275E,H417E human tissue-type plasm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5385732-A.
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Human t-PA variant
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Human tPA variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR21597 standard; protein; 527 AA.
tPA variant - E94A, D95A, D236A, D238A,
                                                       (GEMY) GENETICS
(LARS/) LARSEN G
                                                                                                                                                                        (GEMY ) GENETICS INST INC. (LARS/) LARSEN G R.
                                                                                                                                                                                                                                                                                                                                                                                                              WO9211377-A1.
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          AP70879 standard;
AP70879 standard; protein; 530 AA.
hrombolytic proteins 1-1-1-7 having t-PA activity, where R275 is deleted
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                                 ocal Similarity
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                                                                   INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 527 AA. (N103, A445, A449)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; 527 AA. (N105, S107).
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23.0%;
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Pred.
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Pred. No. 3.3e-07;
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No. 3.3e-07;
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                                 DB 1;
.3e-07;
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.3e-07;
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.3e-07;
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.3e-07;
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Query Match
Best Local Similarity
RESULT 1367
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Best Local Similarity
RESULT 1360
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAP92277 standard; protein; 530 AA. Sequence of modified tPA-type thrombolytic WO8810119-A.
                                                         AAW47535 standard;
Tissue plasminogen
US5714372-A.
                                                  03-FEB-1998
                                                                                                                    03-FEB-1998.
(GETH ) GENENTECH
                                                                                                                                        AAW47537 standard;
Tissue plasminogen
US5714372-A.
                                                                                                                                                                                                                      Tissue plasminogen
US5714372-A.
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Zymogen-like t-PA
WO9206203-A.
                                                                                                                                                                                                                                                                                                                                                                                            AAR23803 standard; protein;
t-PA (Ser 304) mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human tissue plasminogen
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(LARS/) LARSEN G
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7.1%;
Similarity 23.0%;
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h 7.1%;
Similarity 23.0%;
                                       GENENTECH
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standard; protein;
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7.1%;
ity 23.0%;
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activator
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or variant
562
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No. 3.5e-07;
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.3.5e-07;
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Best Local Similarity RESULT 1370
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                      Query Match
Best Local Similarity
RESULT 1377
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                                                                                                                                                    Human coagulation factor VII WO2003037932-A2. 08-MAY-2003.
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w0200220736-A2.
                                                                                                                                                                                                                                                           AAO30631 standard; protein; 406 AA.
Human factor VII variant (K316Q/L305V/V158T/E296V/M298Q/K337A)
WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                               AAM52183 standard;
Human FVII mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB84867 standard; protein; 406 AA Mutant blood coagulant factor VII JP2001061479-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABR39439 standard; protein; 264 AA.
Human GENSET polypeptide clone name vCTRL-1.
WO2003014151-A2.
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KR141262-B1.
                                                                            Human coagulation WO2003037932-A2.
                                                                                                                       (NOVO ) NOVO NORDISK AS.

"XY Match 7.1%;

"I Local Similarity 22.5%;
AAO30587 standard;
Human factor VII va
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                                                       (NOVO ) NOVO NORDISK AS
                                                                                                   AAO30615 standard;
                                                                                                                                                                                                                                                                                                                              (MAXY-) MAXYGEN APS.
                                                                                                                                                                                                                                                                                                                                                     WO200158935-A2.
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h 7.1%; Score 278.5;
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d; protein; 406 AA. variant (S314E/L305V/V158T/E296V/M298Q/K337A)
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                                                                                         factor VII
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22.6%;
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23.4%;
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ID 6.
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I variant
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No. 3
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No. 1.8e-07;
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No. 2.7e-07;
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No. 2.7e-07;
                                                                                        (K316Q/L305V/K337A/V158T)
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                                  2.7e-07;
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.8e-07;
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.5e-07;
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.5e-07;
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NOVO NORDISK

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RESULT
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                                                                                                                                             ADJ55962 standard; protein; 'Human factor VII polypeptide WO2004000366-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO30630 standard; protein; Human factor VII variant (K WO2003037932-A2.
                                                                 ADJ56051 standard; protein; 4 Human factor VII polypeptide WO2004000366-A1.
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(NOVO ) NOVO NORDISK
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                                                                                                                                                                                                                          WO2003037932-A2.
                                                                                                                                                                                                                                                                                                        1 1362
AAO30586 standard; protein; 406 AA.
Auman factor VII variant (S314E/L305V/V158D/E296V/M298Q/K337A)
                                                                                                                                                                                                                                                                                                      WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human coagulation WO2003037932-A2.
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(NOVO ) NOVO NORDISK AS.
7.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                     AAO30618 standard;
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                                                                                                       Local Similarity
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1; protein; 4 polypeptide
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factor VII variant (S314E/L305V/K337A)
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22.5%;
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(K316Q/L305V/V158D/E296V/M298Q/K337A)
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406 AA.
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e mutant
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No.
 V158D/
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                                                                            F374Y/
                                                                                                                                                                                                                                                                                                                                                                                           (K316Q/L305V/K337A/V158D)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (S314E/L305V/K337A/V158D)
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                            2.7e-07;
                                                                                                        2.7e-07;
                                                                                                                                                                                   2.7e-07;
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2.7e-07;
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2.7e-07;
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?.7e-07;
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e-07;
 L305V/
                                                                            V158T/
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 S314E/ K337A
                                   Length
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                                      406;
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Best Local Similarity RESULT 1394
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31.DEC-200
                                                                                                                                                                                                                                                                                                                                                                                  ADJ55972 standard; protein;
Human factor VII protein mut
WO2004000366-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADJ55931 standard; protein; 406 AA. Human factor VII protein mutant V158T/WO2004000366-A1.
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(NOVO ) NOVO NORDISK
                                                                          ADJ55928 standard; protein; 406 AA.
Human factor VII protein mutant V158D/
                                                                                                                                                    ADJ56041 standard; protein; 'Human factor VII polypeptide
                                                                                                                                                                                                                                             ADJ56039 standard;
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TY Match
T.1%;
Local Similarity 22.5%;
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31-DEC-2003.
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Human factor VII mutein F374Y/ V158T/
         ADJ56064 standard; protein;
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Similarity 22.5%;
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mutein F374Y/ V158D/ E296V/ M298Q/
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                                                                                                       3.5; DB 8;
2.7e-07;
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. 2.7e-07;
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2.7e-07;
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                                                                            E296V/ M298Q/
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                                                                                                                                                                                     ; DB 8;
.7e-07;
                            ; DB 8;
.7e-07;
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.7e-07;
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.7e-07;
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.7e-07;
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L305V/ S314E/ K337A.
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Best Local Similarity RESULT 1396
RESULT 1404

ID ADO10602 standard; protein; 406 AA.

DE Human factor VII/VIIa protein mutant #38.
PN W02004029091-A2.

PD 08-APR-2004.
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RESULT 1397
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Best Local Similarity
RESULT 1403
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                                                                                                 ADO10592 standard; pro
Human factor VII/VIIa
WO2004029091-A2.
                                                                                                                                                                                      ADJ56050 standard; protein; 4
Human factor VII polypeptide
                                                                                                                                                                                                                                                            WO2004000366-A1.
                                                                                                                                                                                                                                                                    ADJ55975 standard; protein; 406 AA.
Human factor VII protein mutant V158T/ E296V/ M298Q/ L305V/ K316Q/ K337A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADJ56017 standard; protein;
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WO2004000366-A1.
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ry Match 7.1%;
t Local Similarity 22.5%;
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ry Match 7.1%;
Local Similarity 22.3%;
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                                                                    MAXY-) MAXYGEN APS.
MAXY-) MAXYGEN HOLDINGS LTD.
                                                Local Similarity
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Similarity 22.5%;
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No. 2.7e-07;
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No. 2.7e-07;
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Best Local Similarity RESULT 1407
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RESULT 1405
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                                      Best Local Similarity RESULT 1413
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Best Local Similarity
RESULT 1411
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                                                          Query Match
AAR09225 standard; I
t-PA deletion variar
WO9002798-A.
22-MAR-1990.
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10-DEC-1986.
(ZYMO) ZYMOGENETICS
                                                                                                                                                                               AAR09224 standard;
t-PA deletion varia
                                                                                                                                                                                                                                                             AAR09222 standard; protein; t-PA deletion variant d298.
                                                                                                                                                                                                                                                                                      16-FEB-1994.
(BIOE-) BIOENGINEERING INST
22Y Match 7.1%;
22Y Match 2:milarity 22.9%;
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t-PA mutein (N117Q, N184Q, c
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Human Factor VIIa.
WO9831394-A2.
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Factor VII peptide
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(MAXY-) MAXYGEN
                                                                                       WO9002798-A.
                                                                                                                                                                                                                                                    WO9002798-A
                                                                                                                                                                                                                                                                                                                                                                                                               Human factor VII
US2003087244-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR52562 standard;
                                                                                                 t-PA deletion
                                                                                                            AAR09223 standard;
                                                                                                                                                                      WO9002798-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TEXA ) UNIV TEXAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9323074-A1.
                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                            (VITI-) VITIVITY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB36327 standard;
                                                                                                                                                                                                                                                                                                                                                                       ocal Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                GENENTECH INC.
                                                                  GENENTECH INC.
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N HOLDINGS LTD.
7.1%;
7.1%;
22.6%;
                                                                                               dard; protein;
variant d299.
                  dard; protein; variant d301.
                                                                                                                                                                               lard; protein; variant d300.
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                                                                                                                                                                                                                                                                                                                                                                                                                        d; protein; (F7) prote:
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7.1%;
22.0%;
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encoded l
                                                                                                                               7.1%;
23.3%;
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                                               7.1%;
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23.3%;
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22.0%;
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22.0%;
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protein reference
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delta 296-302,
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                                                                                                                                                                                                                                                                                         ACAD MILITARY.
Score 278.5; DB 2
Pred. No. 3.4e-07;
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No. 3.1e-07;
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3.1e-07;
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3.1e-07;
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                                               5; DB 2;
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.7e-07;
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RESULT
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Factor X (X).
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t-PA deletion variant d303.
                               Human soft
                                                                                                                                                                                                                                                                                                                                                                                ADJ57511 standard; protein; 701 AA.
Human FVII-IgG1 Fc domain fusion protein.
WO2004006962-A2.
                                         ADQ17444 standard;
                                                                                                                                 AAR22511 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP03061484-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR12424 standard; protein; 562 AA.
T-PA variant having Lys416 substitution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP03061484-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR12423 standard; protein; 562 AA.
T-PA variant having Lys416 substitution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR12343 standard; protein; 562 AA.
T-PA with -ve charged finger and/or kringle
JP03061483-A.
                                                                                                                                                                                                                                                                                                                                    (NOVO ) NOVO NORDISK AS.

Y Match 7.1%;
Local Similarity 22.0%;
                                                                                 9-MAR-1992.
CORT-) COR THERAPEUTICS IN.
                                                                                                                                                                                                                                                                    PEKE ) PE CORP NY
                                                                                                                                                                            SCRI ) SCRIPPS RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                FUJI ) FUJISAWA PHARM CO LTD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al Similarity
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PROTEIN DESIGN LABS INC.
                               protein; 488 AA.
sarcoma-upregulated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7.1%;
23.0%;
                                                                                                                                  protein;
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21.9%;
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25.2%;
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Pred.
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Pred. No. 3.7e-07;
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No. 3.5e-07;
                                                               278; DB 2;
No. 3.4e-07;
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No. 3.7e-07;
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No. 3.7e-07;
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No. 3.2e-07;
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No. 2.9e-07;
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                               protein
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Best Local Similarity RESULT 1423
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RESULT 1424
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RESULT 1430
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                                                                                                                                                         AAR70897 standard;
Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR09244 standard; protein;
t-PA deletion variant d297,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR09232 standard; protein; 523 AA. t-PA deletion variant d297-300.
                                                                                                                                                                                                                                              Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                                                                                   Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                                                                                                                                                                      Mutated recombinant tPA. JP04094684-A.
                                                                        Human t-PA variant
US5385732-A.
                                                                                                                                                                                                                                                                    AAR70858 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR05806 standard; protein;
Thrombolytic protein with se
          AAR70873 standard;
                                                                                              AAR70856 standard;
                                                                                                                                                                                                                                                                                                                                                         AAR70896 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR22621 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-MAR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC.
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                              Local Similarity
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h 7.0%;
                                                    GENENTECH INC.
                                                                                                                                                                                                                          GENENTECH INC.
                                                                                                                                                                                                                                                                                                               GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                  KANEKA CORP
                                                                                                                                                                                                                                                         protein; 527 AA.
(N67,A296,A297,A298,A299)
protein; 52 (N67, A477).
                                                                                  protein; 52 (N67, A267).
                                                                                                                                                                      protein; 527 AA. (N103, A347, A348, A349, A351)
                                                                                                                                                                                                                                                                                                                                              protein; 527 AA. (N103, A339, A342)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7.0%;
23.2%;
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22.9%;
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23.3%;
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23.2%;
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23.2%;
                               7.0%;
23.5%;
                                                                                                                 7.0%;
23.2%;
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23.1%;
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24.0%;
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d300.
          527 AA
                                                                                              527 AA
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Pred. No. 3
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Pred.
                               Score 278; DB 2;
Pred. No. 3.7e-07;
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No. 3.7e-07;
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No. 3.7e-07;
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.7e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   488;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plasminogen
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GENENTECH INC.

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RESULT 1434

DE AAP70881 standard; protein; 530 AA.

DE Thrombolytic protein 1-12-1-18 havi

DE R275 is and containing a modified N

WO8704722-A.

PD USGENETICS INST INC.

PA (GEMY) GENETICS INST INC.
            Query Match
Best Local Similarity
RESULT 1440
                                                                                                                        Best Local Similarity RESULT 1439
                                                                                                                                                                                                                                    Best Local
RESULT 1438
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RESULT 1435
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23-SEP-1987.
(GETH ) GENENTECH INC.
AAP81359 standard;
                                                                             AAR13154 standard; protein; 559 AA. T-PA variant having Lys416 substitution JP03061484-A.
                                                                                                                                                                                            T-PA variant having 
JP03061484-A.
                                                                                                                                                                                                                                                                                                                    AAR13151 standard; protein; 559
T-PA with -ve charged finger and
                                                                                                                                                                                                                                                                                                                                                                                                                             AAR13153 standard; protein; 558 AA.
T-PA with -ve charged finger and/or kringle domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thrombolytic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thrombolytic protein 1-12-1-18 having t-PA activity, deleted or replaced R275 is and containing a modified N-linked glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR07033 standard; protein; 528 AA.
Thrombolytic protein with secondary structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified human tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAP71450 standard; protein;
                                                     (FUJI ) FUJISAWA
                                                                                                                                                                                                                       AAR13155 standard;
                                                                                                                                                                                                                                                                                                                                                            (FUJI ) FUJISAWA PHARM CO LTD.
ry Match 7.0%; Score
t Local Similarity 23.0%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-JUN-1990.
(YAMA ) YAMANOUCHI PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JP02145184-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR07034 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GEMY ) GENETICS INST INC. (LARS/) LARSEN G R.
                                                                                                                                                                 (FUJI ) FUJISAWA
                                                                                                                                                                                                                                                                             FUJI ) FUJISAWA PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YAMA ) YAMANOUCHI PHARM CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                              Match 7.0%; Score 278; ocal Similarity 23.0%; Pred. No. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein with secondary structure of human tissue plasminogen
                                                                                                                                                 PHARM CO LTD.
7.0%; Score
                                                     PHARM CO LTD.
                                                                                                                                                                                                         protein; 559 AA.
g Lys416 substitution
protein;
                                                                                                                                     23.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.0%;
22.9%;
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22.9%;
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22.9%;
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23.0%;
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23.2%;
                           23.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   otein; 528 AA.
plasminogen activator
                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        531 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
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Pred.
                         Score
Pred.
                                                                                                                                                                                                                                                                                                                    and/or kringle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 278; DB 2;
Pred. No. 3.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         278;
No. 3.
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No. 3.
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No. 3.
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No. 3
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No. 3.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  278; DB 1;
No. 3.7e-07;
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                                                                                             2)
                                                                                                                                                                                                          <u>4</u>
                                                                                                                                       DB 2;
.9e-07;
                                                                                                                                                                                                                                                   DB 2;
.9e-07;
                                                                                                                                                                                                                                                                                                                                                               DB 2;
.9e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
.7e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
.7e-07;
                            . 9e
                           07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 (8)
                                                                                                                                                     559,
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tissue

plasminogen activator.

Score

277.5;

DВ

٠<u>.</u>

Length

406;

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Best Local Similarity RESULT 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity RESULT 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity RESULT 1443
                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                            Best Local
RESULT 1445
                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity RESULT 1444
                                                                                                                                                                                                                                                   Best Local Similarity RESULT 1446
                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                       Query Match
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07-DEC-1988.
(ZYMO) ZYMOGENETICS I
(NOVO) NOVO IND AS.
(EISA) EISA CO LTD.
                                                                                                                                                                                                                                                                                                  Murine Lrp4 dopaminergic neuronal marker W02004065599-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR23809 standard; protein;
t-PA (Glu 299) mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR04702 standard; protein; 562 AA. Sequence of tissue plasminogen acti with altered residues 87 and 419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP02145184-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR07079 standard; protein;
Thrombolytic protein with se
                                                                                                                                    AAO30549 standard; protein; 4
                                                                                                                                                                                                                           AAO30596 standard; protein; 406 AA.
Human coagulation factor VII variant (K316H/L305V/K337A/V158D)
                                                                                                                                                                                                                                                                                                                                                                                                   Mouse LRP binding WO2003106657-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (YAMA ) YAMANOUCHI PHARM CO

ry Match 7.0%;

t Local Similarity 22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JUN-1990
                               Human coagulation WO2003037932-A2
                                           AAO30561 standard; protein; 4
                                                                                                                                                                                   (NOVO) NOVO NORDISK AS. ry Match 7.
                                                                                                                                                                                                                                                                                                                                                                                                                        ADI27177 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JAN-1990.
                                                                                                                                                                                                                  WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                     (STOW-) STOWERS INST MEDICAL
ry Match 7.0%;
L Local Similarity 20.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NOVO ) NOVO-NORDISK
                                                                                                   (NOVO ) NOVO NORDISK AS.
                                                                                                                                                                    Local Similarity
NOVO NORDISK AS.
                                                                                                                                                                                                                                                                                     EISAI CO
                                                                                                                                                                                                                                                                                                                                                                                                          ; protein; 1113 family protein
                                                                                                                                                                                                                                                                                                                                                                                                                                               7.0%;
23.5%;
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22.7%;
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23.2%;
                                                                                                                                                                      7.0%;
22.5%;
                                                                                                                                                                                                                                                              7.0%;
20.7%;
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7
                                                                            7.0%;
22.6%;
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secondary
                                                                                                                                    406 AA.
I variant
                                                       406
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Pred.
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Pred.
                                                                             Score
Pred.
                                                                                                                                                                       Score
Pred.
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Score 278; DB 8;
Pred. No. 7.4e-07;
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Pred.
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Pred.
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Pred.
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                                                                                                                                                                                                                                                               278;
No. 7.
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No. 3
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No. 3
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No. 3.
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No. 3.9e-07;
                                                                                                                                                                       277.5; DB 6;
No. 3.1e-07;
                                                                             277.5; DB 6;
No. 3.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         structure
                                                                                                                                    (S314E/K337A)
                                              (K316Q/K337A)
                                                                                                                                                                                                                                                               DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
.9e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
.9e-07;
                                                                                                                                                                                                                                                                                                                      SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (t-PA)
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                                                                                                                                                                                                                                                                        Length 1113;
                                                                                         Length
                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   562;
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RESULT
ID AA
DE Hui
PN WO:
PD 08
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Human coagulation 1
WO2003037932-A2.
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                                          Human factor VII variant WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAO30570 standard;
                                                             AAO30609 standard; protein;
                                                                                                                          Human coagulation WO2003037932-A2.
                                                                                                                                            AAO30564 standard;
                                                                                                                                                                                                         Human coagulation WO2003037932-A2.
                                                                                                                                                                                                                             AAO30548 standard;
                                                                                                                                                                                                                                                                                          Human coagulation WO2003037932-A2.
                                                                                                                                                                                                                                                                                                               AAO30529 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAO30611 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human coagulation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human coagulation
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                                                                               (NOVO ) NOVO NORDISK AS.

cy Match 7.0%;
Local Similarity 22.5%;
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TY MATCH 7.0%;
Local Similarity 22.5%;
                                                                                                                                                               (NOVO ) NOVO NORDISK AS.

Ty Match 7.0%;
Local Similarity 22.5%;
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Ty Match 7.0%;
Local Similarity 22.5%;
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TY Match 7.0%;
Local Similarity 22.5%;
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                                                                                                                                                                                                                                              NOVO NORDISK AS.
th 7.0%;
Similarity 22.6%;
  Similarity
                                                                                                                                  factor VII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein; 4 factor VII
                                                                                                                                                                                                                   protein; 4
                                                                                                                                                                                                                                                                                                    protein; 'factor VII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein; 406 AA. factor VII variant (K316Q/L305V/E296V/M298Q)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 4
factor VII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        factor VII
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AS.
7.0%;
22.5%;
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22.5%;
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                                                   ln; 406 AA.
(K316H/L305V/V158T/E296V/M298Q/K337A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      406 AA.
I variant
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I variant
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No.
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  277.5; DB 6;
No. 3.1e-07;
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No. 3.1e-07;
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No. 3.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (K316H/L305V/K337A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (S314E/L305V/V158T)
                                                                                                                                   (K316Q/M298Q)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (K316Q/L305V/V158D)
                                                                                                                                                                                                                    (S314E/L305V)
                                                                                                                                                                                                                                                                                                    (S314E/K316Q)
                                                                                                                                                                7.5; DB 6;
3.1e-07;
                                                                                                                                                                                                                                                 7.5; DB 6; 3.1e-07;
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                                                                                                                                                                                                                                                                                                                                  3.1e-07;
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3.1e-07;
                                                                                  .5; DB 6;
3.1e-07;
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3.1e-07;
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                                                                                                                                                                         6.
         Length
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RESULT 1458
ID AAO3057
DE Human C
PN WO20030
PD 08-MAY-
PA (NOVO)
Best Local Similarity RESULT 1467
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RESULT
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RESULT 1464
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RESULT 1463
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                                                                                                                                                                         RESULT 1465
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                      Query
                                                    AAO30608 standard; protein;
Human factor VII variant (K
WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                                                                       AAO30632 standard; protein; 406 AA.
Human factor VII variant (L305V/K337A)
WO2003037932-A2.
                                                                                                                                                                                                                              Human coagulation WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                   Human coagulation WO2003037932-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAO30624 standard; protein; 406 AA.
Human coagulation factor VII variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAO30581 standard;
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                                                                                                                                         Human coagulation WO2003037932-A2.
                                                                                                                                                                                                                                                  AAO30580 standard;
                                                                                                                                                                                                                                                                                               (NOVO)
                                                                                                                                                                                                                                                                                                                                        AAO30552 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003037932-A2.
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            277.5; DB 6;
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No. 3.1e-07;
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No. 3.1e-07;
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No. 3.1e-07;
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                                                                                                                                                    (K316Q/L305V/V158T)
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. 3.1e-07;
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RESULT 1468
ID AAO3056
DE Human copy WO20030
PD 08-MAY-PA (NOVO)
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ID ADJ5602
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PN WO20040
PD 31-DEC-
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                                                          WO2004000366-A1.
                                                                  ADJ56019 standard; protein; 4
                                                                           ADJ56019 standard;
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WO2004000366-A1.
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ry Match 7.0%;
t Local Similarity 22.5%;
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ry Match 7.0%;
t Local Similarity 22.5%;
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ry Match 7.0%;
t Local Similarity 22.3%;
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RESULT 1479
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                                                                                                                                              ADJ55956 standard; protein; Human factor VII polypeptide WO2004000366-A1.
                                                                                                                                                                                                                          ADJ55897 standard; protein;
Human factor VII polypeptide
WC2004000366-A1.
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Human factor VII pc
WO2004000366-A1.
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ITY MATCH 7.0%;
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Human factor VII protein mut
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                                                                   Human factor VII
WO2004000366-A1.
                                                                           ADJ56036 standard; protein; 'Human factor VII polypeptide
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Query Match
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RESULT 1493
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                                                                                                                                                             ADJ55925 standard; protein; 4
Human factor VII polypeptide
WC2004000366-A1.
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                                                                                ADJ55939 standard; protein; 
Human factor VII polypeptide
WO2004000366-A1.
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Human factor VII polypeptide
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WO2004000366-A1.
ADJ55968 standard;
Human factor VII po
WO2004000366-A1.
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Human factor VII polypeptide
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WO2004000366-A1.
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Human factor VII polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
      GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
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R;Muta, T.; Miyata, T.; Misumi, Y.; Tokunaga, F.; Nakamura, J. Biol. Chem. 266, 6554-6561, 1991 A;Title: Limmlus factor C. An endotoxin-sensitive serine pr. A;Reference number: A38738; MUID:91177916; PMID:2007602 A;Accession: A38738 A;Molecule type: mRNA A;Residues: 1-1019 <mut> A;Cross-references: UNIPROT:P28175; GB:D90271; NID:g217396; A;Cross-references: UNIPROT:P28175; GB:D90271; NID:g217396; A;Accession: B38738 A;Molecule type: mRNA A;Residues: 1-466,616,'DN',619-620,'A',622 <muz></muz></mut>	RESULT 2  A38738  Coagulation factor C precursor - horseshoe crab (Tachypleus tridentatus) N;Alternate names: coagulation-complement factor C; Limulus factor C N;Contains: coagulation factor C heavy chain; coagulation factor C light ch C;Species: Tachypleus tridentatus C;Date: 04-Oct-1991 #sequence revision 04-Oct-1991 #text_change 09-Jul-2004 C;Accession: A38738; B38738; S00105	Query Match  24.1%; Score 949; DB 2; Best Local Similarity 99.4%; Pred: No. 2 2e-56; Matches 180; Conservative 1; Mismatches 0;  540 SLQISAIILHPNYDPILLDADIAILKILDKARISTRVQP      :	ical protein DKFZp586H2123.1 - human (fragments: Homo sapiens (man) 11-Jun-1999 #sequence_revision 11-Jun-1999 #to: 10: T08805 10: T08805 10: the Protein Sequence Database, May 1999 10: nonumber: 216472 10: T08805 10: type: mRNA 10: 181 cANS 10: 181 cA	1490 76 1.9 908 2 T27117 1491 76 1.9 925 2 T37475 1492 76 1.9 926 1 OPPGIT 1493 76 1.9 934 1 A34372 1494 76 1.9 967 2 T48210 1495 76 1.9 1001 2 T48210 1496 76 1.9 1084 2 T18292 1497 76 1.9 1097 2 S17308 1498 76 1.9 1206 2 T18557 1499 76 1.9 1206 2 THS57 1499 76 1.9 1385 2 S34230 1500 76 1.9 1385 2 S34230  ALIGNMENTS
mura, T.; Toh, Y.; Ikehara, Y.; ne protease zymogen with a mosa 2	pleus tridentatus) mulus factor C ion factor C light chain xt_change 09-Jul-2004	Length 181;  Indels 0; Gaps 0 ICLAASRDLSTSFQESHITVA 599	ext_change 09-Ju1-2004 J.; Wiemann, S.	hypothetical prote lipoprotein recept iodide peroxidase complement C6 prec hypothetical prote hipothetical prote nicotinamide nucle leukemia inhibitor probable hydrogena structural polypro 156K protein - Pla

## ALIGNMENTS

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ource: adult uterus; clone DKFZp586H2123
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Protein Sequence Database, May 1999
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sapiens (man)
99 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
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F;136-195/Domain: complement factor H repeat homology <FH01>
F;199-254/Domain: complement factor H repeat homology <FH02>
F;260-321/Domain: complement factor H repeat homology <FH03>
F;260-321/Domain: complement factor H repeat homology <FH03>
F;436-564/Domain: complement factor H repeat homology <FH04>
F;576-634/Domain: complement factor H repeat homology *FH04>
F;685-747/Domain: complement factor C repeat homology *FH04>
F;681-762/Product: coagulation factor C light chain peptide A #status experiment F;763-1019/Product: coagulation factor C light chain peptide B #status experiment F;763-1015/Domain: trypsin homology <TRY>
F;523,534,624,912/Binding site: carbohydrate (Asn) (covalent) #status experiment F;767/Binding site: carbohydrate (Asn) (covalent) #status experimental P;809,865,966/Active site: His, Asp, Ser #status predicted
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A; Residues: 'S', 27-39, 'S', 41, 'T', 43-54, 'E'; 691-782; 950-977 < TOK>
A; Residues: 'S', 27-39, 'S', 41, 'T', 43-54, 'E'; 691-782; 950-977 < TOK>
C; Superfamily: coagulation factor C; C-type lectin homology; complement factor H
C; Keywords: alternative splicing; glycoprotein; hemolymph coagulation; hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  is a novel type of serine protease. A; Reference number: S00105; MUID:88004461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: Lipopolysaccharide-sensitive serine-protease zymogen (factor C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Tokunaga, F.; Miyata, T.; Nakamur
Eur. J. Biochem. 167, 405-416, 1987
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: GB:D90272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;1-25/Domain: signal sequence #status predicted <SIG>;26-690/Product: coagulation factor C heavy chain #status experimental <HCH>
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                                       -KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTM
                                                                                     EGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPFIWNG
                                                                                                                             MGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP----
                                                                                                                                                                         SVEIKP----PSRTNSISRVGSPFLRLPRLPLPLARAAKPPPKPRSSQPSTVDLASKVKLP
                                                                                                                                                                                                                 RRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD------LP
                                                                                                                                                                                                                                                           --IDGFYA--GSSIRYSCEVLHYLSGTETVTCTTNGTWSAPKPRCIKVITCQNPPVPSYG
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                                                                                                                                                                                                                                                                                                                                                                                    HDGTCV-LDKAGS----YKCACLAGYTGQRCENLLEERN--
                                                                                                                                                                                                                                                                                                                                                                                                                                LDKDLIPSSLTETLRGKGLTTTWIGLHRLDAEKPFVWELMDRSNVVLNDNLTFWASGEPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LKSLARSFRFDYVSSSTAGRSGCPDGWFEVEENCVYVTSKQRAWERAQGVCTNMAARLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LRFVMLSLEFDYM-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CSLTAGTVWGTAIYHELSSVCRAAIHAGKLPNSGGAVHVVNNGPYSDFLGSDLNGIKSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QILLES----YPLNAHCEWTIHA----KPGFVI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CSGNYFLMGFNTLKCNPDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIHCPAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IGQETLTCQGNGQWSGQIPQCKKLVFCPDLDPVNHAEHQVKIGVEQKYGQFPQGTEVTYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IFENCKSCR-NGSWGGTL-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PNGQWSSFPPKCIRECAKVSSPEHGKVNAPSGNMIEGATL-----RFSCDS-----PYYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PGAEWNIM----CRECCEYDQIE---CVCPGKREVVGYTIPCCRNEENECDSCLIHPGCT 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IQS--IGSSLHVLFHSDG-SKNFDGFH-----
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25.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 672; DB 2; Length 1019;
Pred. No. 4.5e-37;
7; Mismatches 308; Indels 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQYDYVEVRD-----GDNRDGQIIKRVCGN--ERPAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T.; Morita,
  DHNMWFLQCGGSLLNEKWIVTAAHCVTYSATAEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PMID:3308457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T.; Kuma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----AIYEEITACSSSPCF
                                                                                                                                                                                                                                                                                                                                                                                    -CSDPGGPVNGYQKITGGP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atypical <FH05>
#status experimental
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222;
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Ra-reactive factor (EC 3.4.21.-) 1
N/Alternate names: mannose binding
C/Species: Homo sanione (man)
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A;Residues: 1-234, 'E', '236-284,'G', 286-498,'K', 500-542,'K', 544-642,'S', 644-699
A;Residues: DBU:D17525; NID:g439712; PIDN:BAA04477.1; PID:g439713
A;Experimental source: liver
C;Comment: This is a serum bactericidal factor that activates complement C4 ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 1-699 <SAT-
A;Cross-references: UNIPROT:P48740; GB:D28593; NID:g790963; PID
R;Takada, F.; Takayama, Y.; Hatsuse, H.; Kawakami, M.
Biochem. Biophys. Res. Commun. 196, 1003-1009, 1993
A;Title: A new member of the C1s family of complement proteins
A;Reference number: JN0883; MUID:94059062; PMID:8240317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Sato, T.; Endo, Y.; Matsushita, M.; Fujita, T.
Int. Immunol. 6, 665-669, 1994
A;Title: Molecular characterization of a novel serine protease
A;Reference number: I54763; MUID:94289349; PMID:8018603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Species: Homo sapiens (man)
C;Date: 19-May-2000 #sequence_revision 19-May-2000 #text_change 09-Jul-2004
C;Accession: I54763; JN0883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: Gub: Inhabit, Out. 1997. A;Gross-references: GDB:361104; GDB:330954; OMIM:600521
A;Cross-references: GDB:361104; GDB:330954; OMIM:600521
A;Map position: 3q27-3q28
C;Superfamily: complement-activating serine proteases Clr/Cls/MASP; Clr/Cls repeat C;Superfamily: complement-activating serine pathway; duplication; glycoprotein;
                                                                                                                                                                                                               F;301-362/Domain: complement factor H repeat homology <FH1>
F;367-432/Domain: complement factor H repeat homology <FH2>
F;367-432/Domain: complement factor H repeat homology <FH2>
F;449-691/Domain: trypsin homology <FRY>
F;449-691/Domain: trypsin homology <FRY>
F;49,178,407/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;73-91,143-157,153-166,168-181,185-212,242-260,301-349,329-362,367-414,397-432,436-572,
F;159/Modified site: erythro-beta-hydroxyasparagine (Asn) #status predicted
F;148-449/Cleavage site: Arg-Ile (autolytic) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Keywords: beta-hydroxyasparagine; complement pathway; duplication; F;1-17/Domain: signal sequence #status predicted <SIG> F;18-448,449-699/Product: Ra-reactive factor #status predicted <MAT> F;19-135/Domain: C1/C1s repeat homology <C1R1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary; translated
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                                                                                                                                                                                     ;490,552,646/Active site: His, Asp,
                                                                                                                                                                                                                                                                                                                                                                                                                                     ;143-181/Domain: EGF homology <EGF>;185-294/Domain: CIr/Cls repeat homology <C1R2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genetics:
                                                                Matches
                                                                                       Query Match
Best Local Similarity
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CRNEENECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAGWY----GGD 124
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                                                                                       12.2%;
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                                                                93;
                                                                                          Score 482; DB 1;
Pred. No. 1.4e-24;
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                                                                                                                                                                                        Ser #status predicted
                                                                Mismatches
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                                                                Indels 228;
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ESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYM--

176

-YIGGYYCS-CRFGYILHTDNRT 180

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complement subcomponent Clr (EC 3.4.21.41) precursor [validated] - human (Species: Homo sapiens (man) C; Species: Homo sapiens (man) C; Date: 15-Nov-1984 #sequence revision 30-Jun-1991 #text change 09-Jul-2004 C; Accession: A24170; A29768; A29769; S02422; A00916; A37520; S68830 R; Accession: A24170; A29768; A29769; S02422; A00916; A37520; S68830 R; Leytus, S.P.; Kurachi, K.; Sakariassen, K.S.; Davie, E.W. Biochemistry 25; 4855-4863, 1986 A; Title: Nucleotide sequence of the cDNA coding for human complement Clr. A; Reference number: A24170; MUID:87026566; PMID:3021205
A;Accession: A29769
A;Molecule type: protein
A;Residues: 18-166,'X',168-463 <ARL>
                                                                     A;Molecule type: mRNA
A;Residues: 1-151,'L.;153-705 <JOU>
A;Residues: 1-151,'L.;153-705 <JOU>
A;Cross-references: GB:X04701; NID:g29538; PIDN:CAA28407
A;Arlaud, G.J.; Willis, A.C.; Gagnon, J.
Biochem. J. 241, 711-720, 1987
A;Tilla: Complete amino acid sequence of the A chain of A;Reference number: A29769; MUID:87241248; PMID:3036070
                                                                                                                                                                                                                                   R;Journet, A.; Tosi, M.
Biochem. J. 240, 783-787, 1986
Biochem. J. 240, 783-787, 1986
A;Title: Cloning and sequencing of full-length cDNA encoding A;Reference number: A29768; MUID:87156625; PMID:3030286
A;Accession: A29768
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                                                                                                                                                                                                                                                                                                                                                    A; Cross-references: UNIPROT: P00736;
                                                                                                                                                                                                                                                                                                                                                                                                                            A;Accession: A24170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQE-SHITVAGWNV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVNERTYVVAAHCV---TDLGKVT-----MIKTADLKVVLGKFYRDDDRDEKTIQSLQIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ITGGPGLINGRHAKIGTVVSFF-----CNNSY-VLSGNEKR-----TCQQNGEWSGKQ 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PEVPCPYDYIKIKVGP----KVLGPFCGEKAPEPISTQSHSVLILFHSDNSAENRGWRL-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DSGGPMVTLNRERG----QWYLVGTVSWGDDCGKKDRYG-VYSYIHHNKDWIQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LLGSSWIVTAAHCLHQSLDPGDPTLRDSDLLSPSDFKIILGKHWR--LRSDENEQHLGVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEHGLITFSTRNNLTTYKSEIKYSCQEPYYKMLNNNTGIYTCSAQGVWMNKVLGRSLPTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LPMGYQHLHT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIC-IKACREPKISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGD 398
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----GKIEPSOAKY-----FFKDQVLVSCDTGYKVLKDNVEMDTFQIECLKDGTWSNKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -ETLMEIBIPIVDHSTCQKAYAP--LKKKVTRDMICAG-EKEGGKDACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -KIENITAPKTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QLQYECISPFYRRLGSSR--RTCLRTGKWS----GRA-PSC
                                                                                                                                                                                                                                                                                                                                                      GB:M14058; NID:g179643;
                                                                                                                                                                     PIDN: CAA28407.1;
                                                                                               human complement-classical-pathy
                                                                                                                                                                   PID:g29539
                                                                                                                                                                                                                                                                                                                                                    PIDN:AAA51851.1; PID:g17964
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C;Keywords: acute phase; beta-hydroxyasparagine; calium binding; complement pathway; duf F;1-17/Domain: signal sequence #status predicted <SIG>
F;17-18/Domain: Clr/Cls repeat homology <CIR1>
F;18-463/Product: complement Clr chain A #status experimental <ACH>
F;18-463/Product: Complement Clr chain A #status experimental <ACH>
F;193-302/Domain: EGF homology <EGFP
F;193-302/Domain: Clr/Cls regament #status experimental <GFR>
F;297-463/Product: Clr gamma fragment #status experimental <GFR>
F;309-371/Domain: complement factor H repeat homology <FH1>
F;309-371/Domain: complement factor H repeat homology <FH2>
F;464-705/Product: complement factor H repeat homology <FH2>
F;464-697/Domain: trypsin homology <TRY>
F;464-697/Domain: try
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C;Comment: Clr is a dimer of identical chains, each of which is
A chain, while fragment gamma remains disulfide-bonded to the B
C;Comment: This protein is a serine protease that combines with
n, activate C2 and C4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;125,221,514,581/Binding site: carbohydrate (Asn) (covalent) #status experimental F;167/Modified site: erythro-beta-hydroxyasparagine (Asn) #status experimental F;266/Binding site: phosphate (Ser) (covalent) (by casein kinase II) #status exper F;463-464/Cleavage site: Arg-Ile (autolytic) #status experimental
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A; Residues: 464-705 AR2>
R; Thielens, N.M.; Aude, C.A.; Lacroix, M.B.; Gagnon, J.;
J. Biol. Chem. 265, 14469-14475, 1990
J. Title: Ca(2+) binding properties and Ca(2+)-dependent
A; Title: Ca(2+) binding properties and Ca(2+)-dependent
A; Reference number: A37820; MUID:90354439; PMID:2387866
A; Accession: A37820
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A; Residues: 152-186 <AR3 >
A; Note: 152-Leu was also
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C; Superfamily: complement-activating serine proteases C1r/C1s/MASP; C1r/C1s repeat homology.
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A;Residues: 18-26;'L',153-160;'XX',252-255 <THI>
R;Peslloux, S.; Thielens, N.M.; Hudry-Clergeon, G.;
FEBS Lett. 386, 15-20, 1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gene: GDB:C1R
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A; Residues: 133-137;187-211;610-613 <PEL>
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: GDB:119729; OMIM:216950
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                                                                                                                                               127
186
                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                               TIMFYKGFLAYYQAVDLDECASRSKSGEEDPQPQCQHLCHNYVGGYFCS-CRPGYELQED
RHSCQAEC--SSELYTEASGYISSLEYPRSYPPDLRCNYSIRVERGLTLHLKFLE---PF
                                                                      ---YGGDCMRCGQVLRAPKGQI-LLE---SYPLNAHCEWTIHAKPGFVIQLRFVMLSLEF
                                                                                                                                                                                                                         SCLIHPGCTIF---ENCKSCRNGSWGGTLD-----DFYVKGFYCAECRAGW----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 403.5; DB 1; Pred. No. 2.5e-19;
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                                                                                                                                                                                                                                                                                                                                                                             - PGKREVVGYTIPCC - - - - - RNEENECD
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Clq and Cls to form Cl,
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RESULT 5
A59271
Ra-reactive factor (EC 3.4.21.-) 2 precursor - ]
Ra-reactive factor (EC 3.4.21.-) 2 precursor - ]
Ra-reactive factor (EC 3.4.21.-) 2 precursor - ]
RyAlternate names: mannose binding protein-asso (C; Species: Homo sapiens (man)
C; Accession: A59271
R; Thiel, S; Vorup-Jensen, T.; Stover, C.M.; Sci
Nature 386, 506-510, 1997
A; Title: A second serine protease associated will A; Reference number: A59271; MUID:97242412; PMID
A; Accession: A59271
A; Status: nucleic acid sequence not shown; not a constant of the cons
                       A;Gene: GDB:MASP2
A;Cross-references: GDB:6071500
A;Cross-references: Lp36.2-1p36.3
A;Map position: 1p36.2-1p36.3
C;Superfamily: complement-activating serine proteases Clr/Cls/MASP; CC;Superfamily: complement pathway; duplication; F;1-15/Domain: signal sequence #status predicted <SIG-F;1-15/Domain: Signal sequence #status predicted <SIG-F;16-444,445-686/Product: Ra-reactive factor 2 #status predicted <MATF;19-134/Domain: Clr/Cls repeat homology <CIR1>
F;19-134/Domain: Clr/Cls repeat homology <CIR2>
F;184-293/Domain: Clr/Cls repeat homology <CIR2>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: mRNA
A;Residues: 1-686 <JEN>
A;Cross-references: UNIPROT:O00187; GB:Y09926;
                                                                                                                                                                                                                                                                                                                                                  Genetics:
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F;366-430/Domain: complement factor H repeat homology <FH2>
F;445-679/Domain: trypsin homology <TRY>
F;445-679/Domain: trypsin homology <TRY>
F;72-90,142-156,152-165,167-180,161-241-259,300-348,328-361,366-412,396-430,434-552,
F;158/Modified site: erythro-beta-hydroxyasparagine (Asn) #status predicted
F;444-445/Cleavage site: Arg-Ile (autolytic) #status predicted
F;483,532,633/Active site: His, Asp, Ser #status predicted
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                                                                                                                                                                                                                                                                       SARTTGGRIYGGQKAKPGDFPWQVLILGGTT------AAGALLYDNWVLTA
                                                                                                                                                                                                                                                                                                                                                                                                          DRPMPACSIVDCGPP--DDLPSGRV
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--LDSETERWFVGGIVSWGSMNCGEAGOYGVYTKVINYIPWIE
                                                                                                 DTLRSGVVSVVDSLLCEEQHEDHGIP-VSVTDNMFCASWEPTAPSDICTAETGGIAAVSF
                                                                                                                                                                    ILLDADIAILKLLDKARISTRVOPICLAASRDLSTSFQESHITVAGWNVLADVRSPGFKN
                                                                                                                                                                                                                                      AHCVTDLGKVIMIKTADLKVVLGKFYRDDDRDEKTIQSLQ-----ISAIILHPNY-DP
                                                                                                                                                                                                                                                                                                                                                                       PFGDLPMGYQHLHTQLQYECISPFY-RRLGSSRRTCLRTGKWSG-----RAPSCIPICGK
                                  PGRASPEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWIE
                                                                  RNLMYVDIPIVDHQKCTAAYEKPPYPRGSVTANMLCAGLE-SGGKDSCRGDSGG--ALVF
                                                                                                                                    AGFONDÍALIKLNNKVVÍNSNITÞÍCLPRKEAESFMRTDDIGTASGWG----LTQRGFLA
                                                                                                                                                                                                     AHAVYE----
                                                                                                                                                                                                                                                                                                       IENITAPKTQGLR-----WPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVA
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Pred. No. 3.
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1.9e-19;
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7

complement subcomponent C1s (EC 3.4.21.42) precursor [similarity] - golden hamster C;Species: Mesocricetus auratus (golden hamster)
C;Date: 10-Sep-1999 #sequence\_revision 10-Sep-1999 #text\_change 09-Jul-2004
C;Accession: S05008
C;Accession: S05008
R;Kinoshita, H.; Sakiyama, H.; Tokunaga, K.; Imajoh-Ohmi, S.; Hamada, Y.; Isono, K. FBBS Lett. 250, 411-415, 1989
A;Title: Complete primary structure of a calcium-dependent serine proteinase capable RESULT S05008 capable <u>~</u> 얁 Sak

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A;Reference number: S05008; MUID:89325606; PMID:2753140
A;Accession: S05008
A;Molecule type: mRNA
A;Residues: 1-695 < KIN>
A;Residues: 1-695 < KIN>
A;Cross-references: UNIPROT:P15156; EMBL:X16160; NID:g49621; PIDN:CAA34286.1; PID:g49622
A;Cross-references: UNIPROT:P15162, Adv-protion and protion and protional and pr
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---GAKLPVTSLEKCRQVKEENPKARADDYVFTSNMICAGEKGV---DSCQGDSGGAFAL
                                                    LRSGVVSVVDSL-----LCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAV
                                                                                                         LKDPVKMGPTVSPICLPGT---SSEYEPSEGDLGLISGWGRTERRNIVIQLR-----
                                                                                                                                                                 LLDKARISTRVQPICLAASRDLSTSFQESH---ITVAGW-----NVLADVRSPGFKNDT
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    IQQRIFGGFPAKIQSFPWQVFFBFPRAGGALIGEHWVLTAAHVVEGNSDPS

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21.8%; Pred. No. 1.2e-17;
tive 81; Mismatches 227; Indels 293
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A;Status: pre-----A;A;Aclecule type: mRNA
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A;Cross-references: UNIPROT:Q91674; EMBL:U81290; NID:g2981640;
A;Cross-references: UNIPROT:Q916740; NID:g2981640;
A;Cross-references:Q916740; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g2981640; NID:g29816
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R;Yang, J.C.; Lindsay, L.L.; Hedrick, J.L.
submitted to the EMBL Data Library, March 199
A;Description: cDNA cloning of ovochymase, a
A;Reference number: Z20829
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C;Species: Xenopus laevis (African clawed frog)
C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004
C;Accession: T30337
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A; Status: prelimina
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        166;
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PVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSH:||:|||::::::||||||::|
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAI-YRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTAD---LK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DKAGSYKCACLAGYTGORCENLLEBRNCSDP-----GGPVNGYQKITGGPGLIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KGQI----LLESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYMCQYDYVEVRDGDNRDG
                                                                                                                                                                                                                                                                                                                           VVLGKEYRDDDR--DEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AIALDVCGMAPM------TPKW-----WLPRIVGGEE--ASPNS----WPWQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ---LQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIP-ICGKIENITAPKTQGLRWPWQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TLPLPISSPENTMLIRFKTDMENSYPG--FKVKFSFVPKEKQFSLPVDDTPT-ISMLHPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VI.PMQVQSRE-----TPLHQLYSAAFSKQKLQSAPTKKP-ALPFGDLPMGYQHLHTQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRR---R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CPGKREVVGY----TIPCCRNEENECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVK
                                                                                                            CLPEPEEVLT -- PASVCVVTGWGNTAEDGQPALGLQQLQ --- LPILDSIICNTSYYSG--
                                                                                                                                                                                CLAASRDLSTSFQESHITVAGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YGHGCIYDAVE-----VYDGAEEK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KMIRKVCGSTIPSPLIVRSNKVTVTFFSDGTFTGRGFEIQFLAIPTKAASAC---GSAKIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NGTVRYPLSGNYSINSVCRWMLAVQKAKTIEIRFLQLDIEDHATCTFDYLSFTVNE----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------MIYSPNYPDPYPRLKTCSWIIEAPENHIVKLKFEDFNVE
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Pred. No. 1.2e-15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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CIPICGKIENITAPKTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVC 489    :    ::  : ;     R;Spycher,	APTKKPALPEGDLPMGYQHLHTQLQYECISPEYRRLGSSRRTCLRTGKWSG 437 A;Title: T	QQNGEWSGKQPICIKACREPKISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKL 384 A;Molecule	ENLLEERNCSDPGGPVNGYQKITGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRT 328 A;71tle: Composition of the	HGDPIPCPKEISANSIWEPEKAKYVFKDVVKITC 327 R;Tosi, N J. Mol. E	VEPADSEGNCHDSLTFAAKNQQFGFYCGNGFFGPLTIKTQSNTLDIVFQTDL 282  A;Cross-re A;Cross-re A;Accessio A;Molecule A;Molecule	VRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDG 222	CMRCGV MARKEN COLLEGES I FUNNAI CEMIL FRANCE VIQUET VIQUET VIQUET (173 )	171	YDSVQIISGGIEEERLCGQRSSKSPNSPTVEEFQFPYNRLQVVFTSDFSNEERFTG 128  A;Accessio  A;Accessio	R;TOS1, M.  YDQIECVCPGKREVVGYTIPCCRNEE 73 Biochemist:		trypsin nomology <pre></pre>	peat homology <fhr>  C/Acces  C/Acces  R/Kusum</fhr>	'-activating Berine proceases Cir/Cis/Mass; Cir/Cis repeat nomoly glycoprotein, hydrolase; serine proteinase predicted <sig> repeat homology <cir> repeat homology <cir></cir></cir></sig>	Continuous Civilia Maga. Civilia magast	Molecule type: mRNA Residues: 1-694 <sak> Residues: 1-694 <sak> Cross-references: UNIPROT:070542; DDBJ:D88250; NID:g3080541; PIDN:BAA25797.1; PID:g308 Db Comment: This protein is involved in glial cell differentiation and cartilage remodeli</sak></sak>	Title: Molecular cloning of a cDNA encoding a serine protease homologous to complement Reference number: JC6554; MUID:98192519; PMID:9524231 Accession: JC6554	shimura, Y.; Sakai, N.; Nozawa, Y.	gicus (Norway rat) quence_revision 05-Dec-1998 #text_change 09-J	subcomponent Cls (EC 3.4.21.42) precursor [similarity] - rat	Qy	:  :      : Db	AFTKYLPFKDWIERNMK 720 QY	ELTDHMLCAGFPSSKEKDACQGDSGGPLVCQNEKEQFSIYGLVSWGEGCG- 794 Db
s: 438-483,'X',485-500;503-534;542-558;561 , S.E.; Nick, H.; Rickli, E.E.	The serine proteinase chain of human complone number: A05140; MUID:84104122; PMID:636; on: A05140	e type: DNA 8: 356-513,'G',514-688 <to2> P.E.; Dunbar, B.; Fothergill, J. 215, 565-571, 1983</to2>	Complement genes Clr and Cls reacure an 1 ce number: S05634; MUID:90040704; PMID:25 on: S05634 not compared with conceptual translation	nes: 16-38;68-116;170-236;246-262;265-280;28: M.; Duponchel, C.; Meo, T.; Couture-Tosi, E Biol. 208, 709-714, 1989		e type: mRNA s: 1-688 <mac></mac>	A;Title: Molecular cloning of cDNA for human compler A;Title: Molecular cloning of cDNA for human compler A;Reference number: S00224; MUID:88082788; PMID:3500 A;Accession: S00224	s: 1-688 <tos> eferences: GB:M187 on, C.M.; Carter,</tos>	ce number: A27381; MUID:88163522; PMID:283 on: A27381 e type: mRNA	try 26, 8516-8524, 1987 Complete CDNA seguence (	₩ <u> </u>	Human genes for coce number: A40496; on: A40496	on: A40496; A27381; S00224; S26732; S05634 o, H.; Hirosawa, S.; Salier, J.P.; Hagen, l Acad Sci II S. A. BS 7307-7311 1988	t subcomponent Cls (EC 3.4.21.42) precurson te names: Cl esterase precursor : Homo sapiens (man)		715 IERNMK 720   :  : 681 ILKTMQ 686		655 TAPSDICTAETGGIAAVSFPGRASPEPRWHLMGLVSW	599 AGMNVLADVRSPGFKNDTLRSGVVSVVDSLLCEE	517 HPSWKQEDDLNTRTNFDNDIALVQLKDPVKMGPTVAP	549 HPNYDPILLDADIAILKLLDKARISTRVQP	468 -GALIDEYWVLTAAHVVEGNSDPVMYVGSTLLKI	RT	423 ELPKCIPVCGVPTEPFKVQQRIFGGYSTKIQSFPWQVY

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MK 720
|:
|MQ 686
                                                                                                      DICTAETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDW 714
                                                                                                                                                                                                                                            KQEDDLNTRTNFDNDIALVQLKDPVKMGPTVAPICLP---ETFSDYNPSEVDLGLI
                                                                                 -RTEIRTNVIQ----LRGAKLPITSLEKCOOVKVENPKARSNDYVFTDNMICAGEKG
                                                                                                                                                                                                      VLADVRSPGFKNDTLRSGVVSVVDSLLCE----EQHEDHGIPVSVTDNMFCASWEP
                                                                                                                                                                                                                                                                                    DP-----ILLDADIAILKLLDKARISTRVOPICLAASRDLSTSFQESHI----TV
                                                                                                                                                                                                                                                                                                                            IDEYWVLTAAHVVEGNSDPVMYVGSTLLKI-----ERLRNAQRLITERVII
                                                                                                                                                                                                                                                                                                                                                                 VNERTVVVAAHCVT-DLGKVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQISAIIL
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onent C1s (EC 3.4.21.42) precursor [validated] - human C1 esterase precursor

ppiens (man)
27 #sequence\_revision\_31-Mar-1992 #text\_change\_09-May-2004
92 #sequence\_revision\_31-Mar-1992 #text\_change\_09-May-2004
95; A27381; S00224; S26732; S05634; A05140; A25396; A38407; B37820
1008awa, S.; Salier, J.P.; Hagen, F.S.; Kurachi, K.
1008col. U.S.A. B5, 7307-7311, 198
1008col. U.

g: GB:J04080; NID:g179645; PIDN:AAA51852.1; PID:g179646
thel, C.; Meo, T.; Julier, C.
3516-8524, 1987
cDNA sequence of human complement C1s and close physical linkage of the cDNA sequence of human complement C1s and close physical linkage of the cA7381; MUID:88163522; PMID:2831944

s: GB:M18767; NID:g179647; PIDN:AAA51853.1; PID:g179648 'Carter, P.E.; Smyth, S.J.; Dunbar, B.; Fothergill, J.E. 169, 547-553, 1987 Cloning of cDNA for human complement component Cls. The complete : S00224; MUID:88082788; PMID:3500856

amino

: EMBL:X06596; NID:g29542; PIDN:CAA29817.1; PID:g763110

protein 68-116;170-236;246-262;265-280;282-284;287-308,315-363;384-394;421-435 2hel, C.; Meo, T.; Couture-Tosi, E. 709-714, 1989 nt genes C1r and C1s feature an intronless serine protease domain close r; S05634; MUID:90040704; PMID:2553984

13,'G',514-688 <TO2>
Inbar, B.; Pothergill, J.E.
565-571, 1983
ne proteinase chain of human complement
r: A05140; MUID:84104122; PMID:6362661 component C18. Cyanogen bromide

3,'X',485-500;503-534;542-558;561-572,'A',574-601;617-623;626-644;647-ick, H.; Rickli, E.E.

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F;438-675/Domain: trypsin homology <TRY>
F;65-83,135-147,143-156,158-171,175-202,234-251,294-341,321-354,359-403,386-421,425-549, F;65-83,135-147,143-156,158-171,175-202,234-251,294-341,321-354,359-403,386-421,425-549, F;149/Modified site: erythro-beta-hydroxyasparagine (Asn) (partial) #status experimental F;174,406/Binding site: carbohydrate (Asn) (covalent) #status experimental F;437-438/Cleavage site: Arg-Ile (complement subcomponent Clr) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Map position: 12p13-12p13
A;Introns: 291/1; 329/3; 356/1; 399/1; 424/1
A;Introns: 291/1; 329/3; 356/1; 399/1; 424/1
A;Note: the list of introns may be incomplete
C;Superfamily: complement-activating serine proteases Clr/Cls/MASP; Clr/Cls repeat homol
C;Keywords: acute phase; beta-hydroxyasparagine; calcium binding; complement pathway; du
F;1-15/Domain: signal sequence #status predicted <SIG>
F;11-127/Domain: Clr/Cls repeat homology <ClRl>
F;16-688/Product: complement subcomponent Cls #status experimental <MAT>
F;16-437/Product: complement subcomponent Cls chain A (heavy chain) #status experimental
F;135-171/Domain: EGF homology <EGF>
F;175-287/Domain: Clr/Cls repeat homology <ClR2>
F;175-287/Domain: Clr/Cls repeat homology <ClR2>
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A;Residues: 131-134,'X',136-146,'X',148-150;155,'X',157-162;166-170,'X',172-174,'X',176-
A;Residues: 131-134,'X',404-408;416-424,'X',426-431;547-556;592-597;617,'X',619-627,'X',629-635
R;Thielens, N.M.; Aude, C.A.; Lacroix, M.B.; Gagnon, J.; Arlaud, G.J.
J. Biol. Chem. 265, 14469-14475, 1990
A;Title: Ca(2+) binding properties and Ca(2+)-dependent interactions of the isolated NH-
A;Reference number: A37820; MUID:90354439; PMID:2387866
A;Accession: B37820
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A; Residues: 16-25; 'x', 203-207 <THI>
R; Thielens, N.M.; Van Dorsselaer, A.; Gagnon, J.; Arlaud, G.J.
Biochemistry 29, 3570-3578, 1990
A; Title: Chemical and functional characterization of a fragment of C1s
A; Reference number: A32672; MUID: 90283368; PMID: 2141278
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A;Residues: 16-61;168-219;287-293,'K',295-334;384-445 <SPY>
A;Residues: 15-61;168-219;287-293,'K',295-334;384-445 <SPY>
R;Hess, D.; Schaller, J.; Rickli, E.E.
Blochemistry 30, 2827-2833, 1991
A;Title: Identification of the disulfide bonds of human complement Cls.
A;Reference number: A38407; MUID:91175725; PMID:2007122
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F;359-421/Domain: complement factor H repeat homology <FH2>
F;438-688/Product: complement subcomponent C1s chain B (ligi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Contents: annotation; erythro-beta-hydroxyasparagine site, content A;Note: about half of the A chains contain erythro-beta-hydroxyasparagine C;Comment: This protein is a serine proteinase that combines with Clq and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Title: Human comp
A; Reference number:
A; Accession: A25396
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Comment: Cls is a dimer of identical chains, each of which is activated by cleavage in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C2 and C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,529,632/Active site: His, Asp, Ser #status predicted
                                                                                                                                       141 VPCSHFCNNFI---GGYFCSCPPEYFLHDDMKNCGVNCSGDVFTALIGEIASPNYPKPYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      137 GQILL----ESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYMCQYDYVEVRDGDNRDG 192
                                                                                                                                                                                                                                                                                                                                                              193 QIIKRVCGNERPAPI----QSIGSSLHVLFHSDGS--KNFDGFHAIY--EEITACS---S
                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
ENSRCEYOIRLEKGFQVVVTLRREDFDVEAADSAGNCLDSLVFVAGDRQFGPYCGH----
                                                                   TGQRCENLL---
                                                                                                                                                                                                                   SPCFHDGTCVLDKAGSYKCACLAGY-----
                                                                                                                                                                                                                                                                                      RLCGQRSSNNPHSPIVEEFQVPYNKLQVIFKSDFSNEERFTGFAAYYVATDINECTDFVD
                                                                                                                                                                                                                                                                                                                                                                                                                                      GEILSPNYPQAYPSEVEKSWDIEVPEGYGIHLYFTHLDIELSENCAYDSVQIISGDTEEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8.5%;
21.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 334; DB 1;
Pred. No. 1.1e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                            --EERNCSD------PGGPVNGYQKIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels 260;
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A;Molecule type: mRNA
A;Residues: 1-1019 <KIT>
A;Cross-references: UNIPROT:P98073; GB:U09860; NID:g746412; PI
A;Cross-references: UNIPROT:P98073; GB:U09860; NID:g746412; PI
R;Kitamoto, Y.; Yuan, X.; Wu, Q.; McCourt, D.W.; Sadler, J.E.
Proc. Natl. Acad. Sci. U.S.A. 91, 7588-7592, 1994
A;Title: Enterokinase, the initiator of intestinal digestion, N;Alternate names: enterokinase C;Species: Homo sapiens (man) RESULT A56318 A;Title: cDNA sequence and chromosomal localization of human enterokinase, the proteolytia;Reference number: A56318; MUID:95234679; PMID:7718557 R;Kitamoto, Y.; Veile, R.A.; Donis-Keller, H.; Sadler, Biochemistry 34, 4562-4568, 1995 C;Date: 19-May-1995 #sequence\_revision 09-Aug-1996 #text\_change C;Accession: A56318; B43090 A; Cross-references: GB: U09860 A;Residues: 749-1019 <KI2> A;Status: nucleic acid sequence not shown A;Accession: B43090 A; Reference number: A43090; MUID: 94329561; PMID: 8052624 A; Accession: A56318 enteropeptidase (EC 3.4.21.9) precursor [validated] - human A;Molecule type: mRNA ; PIDN:AAC50138.1; PID:g746413 .E. 18 a 09-Jul-2004 mosaic protease compos

A;Map position: 21q21-21q21 C;Complex: Mature enteropeptidase is variously reported to contain two (heavy and light) ed by a disulfide bond. Possibly, conversion from membrane-bound to soluble forms involve

A;Cross-references: GDB:384083; OMIM:226200

A; Gene: GDB: PRSS7

otated below) or with amino-terminal

association with the membrane of the intestinal brush-terminal myristoylation of the heavy chain.

border

Comment: The mechanism of

A;Description: cleaves activation peptide from trypsinogen to produce active trypsin

ducts. C; Function:

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A; Pathway: intestinal digestive hydrolase cascade
C; Superfamily: enteropeptidase; Clr/Cls repeat homology; LDL receptor ligand-binding
C; Keywords: glycoprotein; hydrolase; serine proteinase; transmembrane protein; zymoge
F;1-784/Product: enteropeptidase heavy chain #status predicted <HCH>
F;22-38/Domain: transmembrane #status predicted <TMM>
F;184-221/Domain: LDL receptor ligand-binding repeat homology <LDL1>
F;342-504/Domain: MAM homology <MAM>
F;342-504/Domain: MAM homology <MAM>
F;343-671/Domain: LDL receptor ligand-binding repeat homology <LDL2>
F;678-783/Domain: LDL receptor ligand-binding repeat homology <HDL2>
F;678-783/Domain: Beavenger receptor cysteine-rich domain homology #status atypical <F;785-1014/Domain: trypsin homology <HDL2>
F;165-1014/Domain: trypsin homology <HDL3-
F;165-1014/Domain: trypsin homology <HDL3-
F;165-1014/Domain: trypsin homology <HDS-
F;167-1014/Domain: trypsin h
J. Biol. Chem. 269, 19976-19982, 1994
A;Title: Structural characterization of porcine enteropeptidase.
A;Reference number: A53663; MUID:94327548; PMID:8051081
A;Accession: A53663
                                                                                                RESULT 11
A53663
N;Alternate names: enterokinase
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 07-Oct-1994 #sequence_revision 09-Aug-1996 #text_change 28-Apr-2003
C;Accession: A53663
C;Accession: A53663
R;Matsushima, M.; Ichinose, M.; Yahagi, N.; Kakei, N.; Tsukada, S.; Miki, K
J. Biol. Chem. 269, 19976-19982, 1994
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Pred. No. 2.4e-14;
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                                                                                                                                          S.; Miki, K.;
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                                                                                                                                          Kurokawa,
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A; Molecule type: mRNA
A; Residues: 1-1034 <MAT>
A; Residues: 1-1034 <MAT>
A; Residues: 1-1034 <MAT>
A; Residues: 1-1034 <MAT>
A; Cross-references: GB:D30799; NID:g505122; PIDN:BAA06459.1; PID:g505123
A; Cross-references: GB:D30799; NID:g505122; PIDN:BAA06459.1; PID:g505123
A; Note: parts of this sequence, including the amino ends of three chains isolated A; Note: mechanism of association with the membrane of the intestinal brush otated below) or with amino-terminal myristoylation of the heavy chain.
C; Complex: Mature enteropeptidase is variously reported to contain two (heavy and ed by a disulfide bond. Possibly, conversion from membrane-bound to soluble forms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;541-646/Domain: Clr/Cls repeat homology <ClR>
F;558-692/Domain: LDL receptor ligand-binding repeat homology <LDL2>
F;658-692/Domain: EDL receptor ligand-binding repeat homology #status atypical <SRCF
F;693-798/Domain: scavenger receptor cysteine-rich domain homology #status atypical <SRCF
F;800-1034/Product: enteropeptidase light chain #status predicted <LCH>
F;800-1034/Product: trypsin homology <TRY>
F;116,147,170,194,283,343,350,403,455,485,518,549,645,697,701,721,740,761,804,863,902,967
F;787-911,825-841,925-992,956-971,982-1010/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;22-38/Domain: transmembrane #status predicted <TMM>
F;52-117/Product: enteropeptidase mini chain #status predicted <MCH>
F;118-799/Product: enteropeptidase heavy chain #status predicted <HCH>
F;118-799/Product: enteropeptidase heavy chain #status predicted <HCH>
F;199-236/Domain: LDL receptor ligand-binding repeat homology <LDL1>
F;357-519/Domain: MAM homology <MAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Function: Cleaves activation peptide from trypsinogen to produce A;Description: cleaves activation peptide from trypsinogen to produce A;Description: intestinal digestive hydrolase cascade C;Superfamily: enteropeptidase; Clr/Cls repeat homology; LDL receptor C;Keywords: glycoprotein; hydrolase; serine proteinase; transmembrane
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Best Local (
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                                                                                                                                                                                                                                                                     SLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQESHI-TV 598
                                                                                                                                                                                                                                                                                                                                                                                    LHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVLGKFYRDDDRDEKTIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                           HKSC---GK------KQVAQEVSPKIVGGNDSREGAWPWVVALY-----YNGQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RRTCLRTGKWSGRAPSCIPICGKIENITAPKTQGLR-----WPWQAAIYRRTSGVHDGS 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NSSMPFFSSGGGPF--VKLNTAPNGSLILTASE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SRETPLHQLYSAAFSKOKLOSAPTKKPALPFGDLPMGYQHLHTQLQYECISPFYRRLGSS 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIW----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVLPMQVQ 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGECVL------LVNLCDGFSHCKDGSDEAHCVRFLNGTANNSGLVQFRIQ 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --GTCVLDKAGSYKCACLAGYTGORCENLLEERNCSDPGGPVNGYQKITGGPGLINGRHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -PGPVEDVFSTTNRMTVLFITNDALTKGGFKANFTTGYHLGIPE-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RPAPIQSIGSS---LHVLFHSDGS-----KNF-DGFHAIYEEITACSSSPCFHD----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYMCQYDYVEVRDGDNRDGQIIKRVCGNE
                                                DICTAETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWIE
DSCQGDSGG-
                                                                                                                                                            AGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPS 658
                                                                                                                                                                                                                     TRLIDEIVINPHYNRRRKDSDIAMMHLEFKVNYTDYIQPICLPEENQV---FPPGRICSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                              -LLCGASLVSRDWLVSAAHCV--YGR--NLEPSKWKAILG-LHMTSNLTSPQIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8.4%;
PLMCLENNRWILLAGVTSFGYQCALPNR-PGVYARVPKFTEWIQ 1030
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; Pred. No. 2.9e
86; Mismatches
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F;139-174/Domain: BGF homology <EG2>
F;199-461/Domain: heavy chain #status predicted <PCH>
F;199-461/Domain: heavy chain #status predicted <ACT>
F;199-211/Domain: activation peptide #status predicted <ACT>
F;212-461/Product: vitamin K-dependent serine proteinase #status predicted <VIT>
F;212-445/Domain: trypsin homology <TRY>
F;212-445/Domain: trypsin homology <TRY>
F;47,48,55,57,60,61,66,67,70,76/Modified site: gamma-carboxyglutamic acid (Glu) #status F;112/Modified site: erythro-beta-hydroxyaspartic acid (Asp) #status predicted
F;111-130,139-150,146-159,161-174,182-319,238-254,373-387,398-426/Disulfide bonds: #status F;214,290,355/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein C (activated) (EC 3.4.21.69) precursor N;Alternate names: vitamin K-dependent serine C;Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;34-41/Domain: propoptide #status predicted <PRO>
F;42-196,199-461/Product: protesin C #status predicted <PRC>
F;42-196/Domain: light chain #status predicted <PCL>
F;43-130/Domain: EGF homology <EG1>
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A;Title: Isolation and characterization of A;Reference number: JX0210; MUID:92316897; A;Accession: JX0210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology;
Keywords: beta-hydroxyaspartic acid; blood coagulation; calcium binding; carboxyglutam;
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;Experimental source: liver
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253,299,402/Active site: His, Asp, Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                        211
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                                                                                                                                                                                                                  485 WFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQIS 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           152 WTI-----HAKPGF------VIQLRFVMLSLEFDYMCQYDYVEVRDGDNRDGQIIKRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein C is the zymogen of the vitamin K-dependent serine proteinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
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  WNVLADVRSPGFKNDTL---
                                                  EILVHPNYTRSSSDNDIALLRLAQPATLSKTIVPICLPNNGLAQQELTQAGQETVVT--G
                                                                                                       AIILHPNYDPILLDADIAILKLLDKARISTRVQPICL----AASRDLSTSFQESHITVAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---CAPGYELADDHMRCKSTVNFPCGKLGRWIEK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YKCACLAGYTGQRCENLLEERNCSDPGGPVNGYQKITGGPGL----INGRHAKIGTVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WGISSIPAHPDPVFSSSEHAHQVLRVRRANSFLE-----EMRPG-SLERECMEEI
                                                                                                                                                                                                                                                                                                                          SRRTCLRTGKWSGRAPSCIPICGKIENITAPKTQGLRWPWQAAIYRRTSGVHDGSLHKGA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                  QSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGDLPMGYQHLHTQLQYECISPFYRRLGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SFFCNNSYVLSGNEKR-----TCQQNGEWSGKQPICIKACREPKISDLVRRRVLPMQV 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FSCSCDKGWEGKFCQQELRFQDC-----RVNNGGCLHYCLEESNGRRCA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDFEEAQEIFQNVEDTLAFWI-----KYFDGDQCSAPPLDHQCDSPCCGHGTCI-DGIGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGNERPAPI-QSIGSSLHVLFHSDGSKNFDGFHAIYEEITACSSSPCFHDGTCVLDKAGS
                                                                                                                                                                --LACGGVLIHTSWVLTAAHCVEGTKKLT------VRLGEY--DLRRRDHWELDLDIK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.1%; Score 320; DB 1
23.9%; Pred. No. 6e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           homology <GLA:
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                                                                                                                                                                                                                                                                        -RIVNGTLTK-QG-DSPWQAILL-----DSKKK--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            precursor
--RSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFC 649
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PMID:1618739
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                218;
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Local Similarity les 146; Conserv

Conservative

8.0%;

Score 317.5; Pred. No. 2.1e 30; Mismatches

2.1e-13 DB 1;

Length 1035;

Indels

143;

Gaps

30

987/Active site:

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F;199-236/Domain: LDL receptor ligand-binding repeat homology <LDL1>
F;358-520/Domain: MAM homology <MAM>
F;542-647/Domain: Clr/Cls repeat homology <ClR>
F;659-693/Domain: LDL receptor ligand-binding repeat homology <LDL2>
F;694-799/Domain: scavenger receptor cysteine-rich domain homology #status atypical <SRCF
F;694-799/Domain: scavenger receptor cysteine-rich domain homology #status atypical <SRCF
F;801-1035/Product: enteropeptidase light chain #status predicted <LCH>
F;801-1035/Product: enteropeptidase light chain #status predicted <LCH>
F;801-1030/Domain: trypsin homology <TRY>
F;116,147,170,194,233,263,264,404,456,486,519,550,646,698,722,741,762,864,903,965/Binding
F;788-912,826-842,926-993,957-972,983-1011/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Comment: The mechanism of association with the membrane of the intestinal brush embrane attachment using a signal-anchor sequence.
C;Comment: Conversion from membrane-bound to soluble forms may involve further proc;Complex: mature enteropeptidase is variously reported to contain two (heavy and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Note: parts of this sequence, in R;Light, A.; Janska, H. J. Protein Chem. 10, 475-480, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-1035 <KIT' A;Residues: 1-1035 <KIT' A;Cross-references: UNIPROT:P98072; GB:U09859; NID:g746410; PIDN:AAB40026.1; PID:g746411 A;Cross-references: unipenal intestine A;Experimental source: small intestine R;LaVallie, E.R.; Rehemtulla, A.; Racie, L.A.; DiBlasio, E.A.; Ferenz, C.; Grant, K.L.; J. Biol. Chem. 268, 23311-23317, 1931 J. Biol. Chem. 268, 23311-23317, 1931 A;Title: Cloning and functional expression of a cDNA encoding the catalytic subunit of bc A;Reference number: A48874; MUID:94043122; PMID:8226855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Kitamoto, Y.; Yuan, X.; Wu, Q.; McCourt, D.W.; Sadler, J.E. Proc. Natl. Acad. Sci. U.S.A. 91, 7588-7592, 1994
A;Title: Enterokinase, the initiator of intestinal digestion, A;Reference number: A43090; MUID:94329561; PMID:8052624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Bos primigenius taurus (cattle)
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: A43090; A48874; A61436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 801-1035 <LAV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Pathway:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: protein
A;Residues: 801-807,'Y',809-827 <LIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: The amino-terminal sequence of the catalytic subunit of bovine enterokinase
A;Reference number: A61436; MUID:92189715; PMID:1799406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: GB:L19663; NID:g416131; PIDN:AAA16035.1; PID:g416132 A;Note: parts of this sequence, including the amino end of the mature pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: A48874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N; Alternate names: enterokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               enteropeptidase (EC 3.4.21.9) precursor [validated] -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Accession: A43090
                                                                                                                                                                                                                                                                                                                                                                              F;22-38/Domain: transmembrane #status predicted <TMM>
F;52-117/Product: enteropeptidase mini chain #status predicted <MCH>
F;118-800/Product: enteropeptidase heavy chain #status predicted <HCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fide linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pathway: intestinal digestive hydrolase cascade;
Superfamily: enteropeptidase; Clr/Cls repeat homology; LDL;
Keywords: glycoprotein; hydrolase; intestine; serine protei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;Description: cleaves propeptide from trypsinogen to produce active trypsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 388
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RESULT 14
EXCH
A;Description: catalyzes the proteolytic activation of prothrombin to thrombin in the pt A;Pathway: blood coagulation C;Superfamily: coagulation factor X; EGF homology; Gla domain homology; trypsin homology C;Keywords: beta-hydroxyaspartic acid; blood coagulation; calcium binding; carboxyglucam F;1-20/Domain: signal sequence #status predicted <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       coagulation factor Xa (EC 3.4.21.6) precursor - chicken N;Alternate names: virus-activating proteinase C;Species: Gallus gallus (chicken) C;Date: 12-Feb-1993 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004 C;Accession: S1583; S20380; S20381 R;Suzuki, H.; Harada, A.; Hayashi, Y.; Wada, K.; Asaka, J.; Gotoh, B.; Ogas FEBS Lett. 283, 281-285, 1991
                                                                                                                                                           A; Molecule type: protein
A; Residues: 241-246, 'X', 248-251, 'X', 253-261
C; Function:
                                                                                                                                                                                                                                                                                                                                                                          R;Gotoh, B.; Yamauchi, F.; Ogasawara, T.; Nagai, Y.
FEBS Lett. 296, 274-278, 1992
A;Tille: Isolation of factor Xa from chick embryo as the amniotic endoprotease responsi
A;Reference number: S20380; MUID:92164779; PMID:1537403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-475 < SUZ>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: S15838; A; Accession: S15838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: Primary structure of the virus activating protease A;Reference number: S15838; MUID:91257322; PMID:2044767
                                                                                                                                                                                                                                                  A; Accession: S20381
                                                                                                                                                                                                                                                                                   A; Residues: 41-55
                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:P25155; DDBJ:D00844; NID:g222869; R;Gotoh, B.; Yamauchi, F.; Ogasawara, T.; Nagai, Y.
                                                                                                                                                                                                                                                                                                                                                       A;Accession: S20380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Status: not compared with conceptual translation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GDSGG-----PLMCQENNRWLLAGVTSFGYQCALPNR-PGVYARVPRFTEWIQ 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALI ---YQGSTADVLQEADVPLLSNEKCQQQMPEY----NITENMVCAGYE-AGGVDSCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DQIVINPHYNKRRKNNDIAMMHLEMKVNYTDYIQPICLPEENQV----FPPGRICSIAGWG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQESHI-TVAGWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---QVCGASLVSRDWLVSAAHCV--YGR--NMEPSKWKAVLG-LHMASNLTSPQIETRLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQI
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    PGPVNDVFSTTNRMTVLFITDNMLAKQGFKANFTTGYGLGIPEPCKEDNFQC

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gotoh, B.; Ogasawara,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIDN:BAA00724.1;
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F;21-40/Domain: propeptide #status predicted <PRO>
F;25-84/Domain: Gla domain homology <GLA>
F;41-185/Product: coagulation factor X light chain #status experimental <LCH>
F;40-121/Domain: EGF homology <EG1>
F;10-121/Domain: EGF homology <EG1>
F;10-475/Product: coagulation factor X heavy chain #status predicted <HCH>
F;186-490/Domain: activation peptide #status predicted <APT>
F;186-240/Domain: activation factor X heavy chain #status experimental <AHC>
F;241-475/Product: coagulation factor X>
F;241-475/Product: coagulation factor X>
F;241-475/Product: coagulation factor X>
F;241-485/Domain: trypsin homology <TRX>
F;46,47,54,56,59,60,65,66,69,72,75-79/Modified site: gamma-carboxyglutamic acid F;46,47,54,56,59,60,65,66,69,72,75-79/Modified site: gamma-carboxyglutamic acid F;57-62,90-101,95-110,112-121,129-140,136-152,154-167,175-348,247-252,267-283,39
F;103/Modified site: erythro-beta-hydroxyspartic acid (Asp) #status predicted F;196,207,28,285/Binding site: carbohydrate (Asn) (covalent) #status predicted F;282,328,425/Active site: His, Asp, Ser #status predicted
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TYFVTGIVSWG--EGCARKGKYGVYTKLSRFLRWVRTVMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITACSSS
                                        RWHLMGLVSWSYDKTCSHR-LSTAFTKVLPFKDWIERNMK 720
                                                                                    VPYVDRSTCKQSTN----FAITENMFCAGYE-
                                                                                                                               -- VVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEP
                                                                                                                                                                                                                   DLSTSFQESHITVAGWNVLADVRSPGFKNDTL---RSGVVS------
                                                                                                                                                                                                                                                               EVDREKEEHSETTHTAE--KIFVHSKYIAETYDNDIALIKLKEPIQFSEYVVPACLPQA-
                                                                                                                                                                                                                                                                                                        KFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASR
                                                                                                                                                                                                                                                                                                                                                                                            AAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAPKTOGL---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -RVLPMQVQSRETPLHQLYSAAFS-KQKLQSAPTKKPALPFGDLPMGYQHLHTQLQYECI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCFHDGTCVLDKAGSYKCACLAGYTGQRCENLLEERNCSDPGGPVNGYQKITGGPGLING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMKQGN-----IERECNEERCSKEEAREA-----FEDNEKT-EEFWNIYVDGDQCSSN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 314.5; DB 1
Pred. No. 1.4e-13;
                                                                                                                                                                             ----DFANEVLMNQKSGMVSGFGREFEAGRLSKRLKVLE
                                                                                      TEQKDACQGDSGG
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RESULT JC7731 15

membrane-bound arginine-specific serine proteinase precursor - rat C;Species: Rattus norvegicus (Norway rat)
C;Bate: 14-Dec-2001 #sequence\_revision 14-Dec-2001 #text\_change 09-Jul-2004
C;Accession: JC7731; JC7775
R;Kishi, K.; Yamazaki, K.; Yasuda, I.; Yahagi, N.; Ichinose, M.; Tsuchiya, Y.; A
J. Biochem. 130, 425-430, 2001
A;Title: Characterization of a membrane-bound arginine-specific serine protease
A;Reference number: JC7731; MUID:21421307; PMID:11530019
A;Accession: JC7731
A;Molecula type: mRNA
A;Residues: 1-855 <KIS> Athauda, from

```
A;Cross-references: UNIPROT:(95JJI7; DDBJ:AB049189

A;Experimental source: strain Male, 7-week-old

R;Satomi, S.; Yamasaki, Y.; Tsuzuki, S.; Hitomi, Y.; Iwanaga, T.; Fushiki, T.

Biochem. Biophys. Res. Commun. 287, 995-1002, 2001

A;Title: A role for membrane-type serine protease (MT-SP1) in intestinal epithelial turn

A;Reference number: JC7775; PMID:11573963

A;Contents: Small intestine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Map position: basolateral cell surface C; Superfamily: membrane-bound arginine-specific serine proteinase C; Keywords: protein digestion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Residues: 1-855 <SAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 7.9%;
Best Local Similarity 21.4%;
Matches 151; Conservative 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cross-references: DDBJ:AB037898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Accession: JC7775
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       359
                                                                                                                                                                                704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           282 DPGGPVNGYQKITGGPGLINGRHAKIGTVVSFFCNNSYVL----SGNEKRTCQQNGEWSG 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140 LLESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYM-----CQYDYVEVRDGDNRDGQII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               324 HPGFEATFFQLPKM---SSCGGLLSE--AQGTFSSP----YYPG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
EKDGRI-----FQAGVVSWG--EGCAQRNKPGVYTRIPEVRDWIK 850
                                            SFPGRASPEPRWHLMGLVSWSYDKTCSHRLST-AFTKVLPFKDWIE 716
                                                                                                                                 KNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGG-IAAV 671
                                                                                                                                                                                NDFTFDYDIALLELEKPAEYSTVVRPICLPDNTHVFPAGKA--IWVTGW---GHTKEGGT
                                                                                                                                                                                                                                                                     PDWLVSAAHCFQD---ETIFKYSDHTMWTAFLG-LLDQSKRSASGVQEHKLKRIITHPSF
                                                                                                                                                                                                                                                                                                               ERTTYVVAAHCVTDLGKVTMIKTAD---LKVVLGKFYRDDDRDEKTIQSLQISAIILHPNY 552
                                                                                                                                                                                                                                                                                                                                                              KNCDCGLRSFTKQARVVGGTNADEGEWPWQVSLHALGQG-----H----LCGASLIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DLPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAPKT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNVNAVSC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KOPICIKACREPKISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFG 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CPAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IRKDLRCDGWADCPDYSDERHCRCNATHQFMCKNQFCKPLFWVCDSVNDCGDGSDEEGCS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VL------DKAGSYKCACLAGY----TGQRCENLL------EERNCS
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                                                                                        GALILQKGEIRVINQTTCEEL----LPQQITPRMMCVGF-LSGGVDSCQGDSGGPLSSV
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Search completed: July 12, 2005, 17:10:04 Job time: 55 secs

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Result
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Maximum Match 100%
Listing first 1500
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Maximum DB seq length: 2000000000
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                                                                                                                                            Score
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Q6div5 xeno;
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p28176 tach;
p28171 tach;
Q868h5 bran;
Q868h6 bran;
Q868h6 bran;
Q868h6 bran;
Q868h6 bran;
Q869h8 ratt;
Q9071 xeno;
Q9171 xeno;
Q9172 rats;
Q92080 mus;
Q990727 mus;
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Genome Res. 13:2265-2270(2003).

-i- SIMILARITY: Belongs to peptidase family S1.

-i- SIMILARITY: Belongs to peptidase family S1.

-i- SIMILARITY: Contains 1 EGF-like domain.

EMBL; AY358346; AAQ88712.1; -.

RESP; P000734; 1B80.

G0; G0:0004263; F: chymotrypsin activity; IEA.

G0; G0:0004263; F: chymotrypsin activity; IEA.

G0; G0:0004295; F: trypsin activity; IEA.

G0; G0:0004295; F: trypsin activity; IEA.

G0; G0:0004295; F: proteclysis and peptidolysis;

R G0; G0:0006509; P: proteclysis and peptidolysis;

R InterPro; IPR000859; CUB.

R InterPro; IPR000181; EGF-Ca.

R InterPro; IPR001254; Peptidase_S1.

R InterPro; IPR001254; Peptidase_S1.

R InterPro; IPR0001314; Peptidase_S1.

R InterPro; IPR0001314; Peptidase_S1.

R InterPro; IPR0001314; Peptidase_S1.

R InterPro; IPR00033; Peptidase_S1.
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InterPro; IPRO01314; Peptidase_S
InterPro; IPRO0903; Pept Ser Cy
InterPro; IPRO0903; Pept Ser Cy
InterPro; IPRO00436; Sushi_SCR_C
Pfam; PPO00081; EGF; 1.
Pfam; PPO00081; EGF; 1.
Pfam; PPO00082; CUB; 1.
SMART; SM00032; CCC; 2.
SMART; SM001042; CUB; 1.
SMART; SM00181; EGF; 2.
SMART; SM00191; EGF; 2.
SMART; SM00192; EGF_CA; 1.
PROSITE; PS01186; EGF_2; 1.
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MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;

Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J

Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J

Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dow

Eaton D., Foster J., Grimaldi C., Gu O., Hass P.E., Heldens S.,

Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,

Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J.

Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts

Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.H., Yansura

Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.
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"The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins:
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PS50923; SUSHI; 2.
PS50240; TRYPSIN DOM; 1.
PS50240; TRYPSIN DOM; 1.
Comain; Hydrolase; Protease; Serine protease.
720 AA; 80198 MW; DC898BC7241289D3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQESHITVAG
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llarity 100.0%;
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Lrel. 27, Last sequence uportel. 27, Last annotation up
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Pred. No. 1.6e-287;
; Mismatches 0;
                                                Craniata; Vertebrata; l
Catarrhini; Hominidae;
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                                                                   Vertebrata; Euteleostomi;
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Query Match
Best Local Simi
Matches 718;
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R HSSP; P00734; 1BB0.

R GG; GG:0005509; F:calcium ion binding; IBA.
R GG; GG:0004263; F:chymctrypsin activity; IEA.
R GG; GG:0004263; F:chymctrypsin activity; IEA.
R GG; GG:0004295; F:trypsin activity; IEA.
R GG; GG:0004295; F:trypsin activity; IEA.
R GG; GG:0006508; P:proteolysis and peptidolysis;
InterPro; IPR000859; CUB.
InterPro; IPR00181; EGF_CA.
InterPro; IPR006210; IEGF_1ike.
InterPro; IPR006210; IEGF_1ike.
InterPro; IPR001134; Peptidase_S1.
InterPro; IPR001134; Peptidase_S1.
InterPro; IPR001134; Peptidase_S1A.
InterPro; IPR001134; Peptidase_S1A.
InterPro; IPR0001254; Peptidase_S1A.
InterPro; IPR000134; Sushi_SCR_CCP.
R InterPro; IPR000436; Sushi_SCR_CCP.
R InterPro; IPR00008; EGF; 1.
R Pfam; PF00008; EGF; 1.
R Pfam; PF00008; EGF; 1.
R Pfam; PF00008; EGF; 1.
R PANART; SM00103; CCCP; 2.
R SMART; SM00113; EGF; 2.
R SMART; SM00119; EGF_CA; 1.
R PROSITE; PS00126; EGF_1; 1.
R PROSITE; PS0126; 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. TISSUE=Colon endot The German cDNA Co
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German cDNA Consortium;
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                                                                                                                                                                                             SSPCFHDGTCVLDKAGSYKCACLAGYTGQRCENLLEERNCSDPGGPVNGYQKITGGPGLI
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PMQVQSRETPLHQLYSAAFSKQKLQSAPTKKFALPFGDLPMGYQHLHTQLQYECISPFYR
                                                                                                                     NGRHAKIGTVVSFFCNNSYYLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVL
                                                                                                                                                                                                                                                                                                                                         YVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITACS
                                                                                      NGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVL
                                                                                                                                                                                                                                                                                                             YVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITACS
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1; Mi
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Pred. No. 7
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RC TISSUES-Placenta;
RX PubMed=14702039; DOI=10.1038/ng1285;
RA Ota T. Suzuki Y. Nishikawa T. Otsuki T., Sugiyama T., Irie R.,
RA Ota T., Suzuki Y. Nishikawa T. Otsuki T., Simura K., Makita H.,
RA Yamamoto J. Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J. Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J. Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J., Saito K., Isono Y., Nakamura Y.,
RA Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Takahashi M., Kanda K., Yokoi T., Puruya T., Kikkawa E., Omura Y.,
RA Tanai H., Kimata M., Watanabe S., Yosida M., Hotuta T., Kusano J.,
RA Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Pujimori K.,
RA Tanai H., Kimata M., Watanabe S., Yosida M., Hotuta T., Nomura Y.,
RA Tanai H., Kimata M., Watanabe S., Yosida M., Hotuta T., Nomura Y.,
RA Musashino K., Yuuki H., Oshima A., Sasaki M., Antia M., Imsee N.,
RA Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA Moriya S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H.,
RA Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Cawakami B.,
RA Yamazaki M., Watanabe T., Sugiyama A., Takemoto M., Cawakami B.,
RA Yamazaki M., Watanabe T., Kobatake N., Inagami A., Fujiwara T.,
RA Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
RA Makagawa K., Watanabe T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
RA Mawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
RA Mawabata R., Kawakami T., Noguchi S., Itoh T., Saigaki M.,
RA Masumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashi H. R.,
RA Makai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sagano S.,
RA Nakai K., Nagase T., Namura N., Kikuchi H., Masuho Y., Yamashi ta R.,
RA Makai K., Nagase T., Nakagama K.,
RA Nakai K., Nagan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q96JW2;
Q96JW2;
Q1-DEC-2001
Q1-DEC-2001
Q1-MAR-2004
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01-DEC-2001 (TrEMBLrel. 26, Last sequence update)
01-DEC-2004 (TrEMBLrel. 26, Last annotation updat
Hypothetical protein FLJ14935.

Bukaryota, Metazoa; Chordata; Craniata; Vertebrat
Mammalia; Eutheria; Primates; Catarrhini; Hominid
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                     . Genet. 36:40-45(2004). SIMILARITY: Belongs to SIMILARITY: Contains 1
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  : Belongs to p
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                     peptidase
EGF-like d
                     e family domain.
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Best Local S
Matches 719
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InterPro; IPRO00209; EGF_1ike.
InterPro; IPRO06209; EGF_1ike.
InterPro; IPRO06210; IEGF
InterPro; IPRO06210; IEGF
InterPro; IPRO01254; Peptidase_S1.
InterPro; IPRO0126; SUBHI_SCR_CCP.
Pfam; PF000081; EGF; 1.
Pfam; PF000089; Trypsin; 1.
Pfam; PF000089; Trypsin; 1.
Pfam; PF000089; Trypsin; 1.
Pfam; PF000089; CCUB; 1.
SMART; SM00002; CCUB; 1.
SMART; SM00002; CUB; 1.
SMART; SM00101; EGF; 2.
SMART; SM00101; EGF; 1.
PROSITE; PS01180; CUB; 1.
PROSITE; PS01180; CUB; 1.
PROSITE; PS01186; EGF_2; 1.
PROSITE; PS01186; EGF_2; 1.
PROSITE; PS0126; EGF_3; 1.
PROSITE; PS0126; EGF_3; 1.
PROSITE; PS05026; EGF_3; 1.
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GO:0008233; F:peptidase activity; IEA.
GO:0004295; F:trypsin activity; IEA.
GO:0006508; P:proteolysis and peptidolysis;
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LGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAA
                                                            WQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVV
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                                                                                                                                                                     OHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAPKTQGLRWP
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F:chymotrypsin activity; II
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RIKEN FANTOM Consortium;
RIKEN FANTOM Consortium;
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01-MAR-2003
MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P. Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishi Y., Nakamura S., Hazama M., Nishine T., Harada A. Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watshiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.
                                                                                                                                                                                                                                                         MEDIINE-20499374; PubMed-11042159; DOI-10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata Konno H., Okazaki Y., Muramatsu M., Hysshizaki Y., Konno H., Okazaki Y., Muramatsu M., Hysshizaki Y., Wuramatsu G., Tagara Y., Wormalization and subtraction of cap-trapper-selected cDN prepare full-length cDNA libraries for rapid discovery of Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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                                                                                                                                                                                                           SEQUENCE FROM
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SEQUENCE FROM N.A.
SINDHERTHYMUS;
TISSUE=Thymus;
DinhMed=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the RIKEN Genome Exploration Research "Analysis of the mouse transcriptome 60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=NOD; TISSUE=Thy The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN=NOD; TISSUE=Thymus;
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"High-efficiency full-length cDNA cloning.";
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STRAIN=NOD; TISSUE=Thymus;
MEDLINE=99279253; PubMed=10349636;
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AR-2004 (TrEMBLrel. 26, Last annotation update)
musculus 2 days neonate thymus thymic cells cDNA, RIKEN full
th enriched library, clone:E430002605 product:hypothetical E
domain, CUB domain, Sushi domain / SCR repeat / CCP module
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OD; TISSUE-Thymus;
21085660; PubMed=11217851; DOI=10.1038/35055500;
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Sciurognathi; Muridae;
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Matches 649
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1. SIMILARITY: Contains 1 EGF-like domain.
                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00084; Sushi; 1.

Pfam; PF00089; Trypsin; 1.

PFAM; PF00089; Trypsin; 1.

PRINTS; PR00722; CHYMOTRYPSIN.

SMART; SM00032; CCP; 2.

SMART; SM000042; CUB; 1.

SMART; SM00181; EGF; 2.

SMART; SM00180; CUB; 1.

PROSITE; PS01180; CUB; 1.

PROSITE; PS01180; EGF_1; 1.

PROSITE; PS01186; EGF_2; 1.

PROSITE; PS01186; EGF_3; 1.

PROSITE; PS0186; EGF_3; 1.

PROSITE; PS5026; EGF_3; 1.

PROSITE; PS5026; TRYPSIN DOM; 1.

EGF-like dommain; Hydrolase; Hypothetical protein; Pro
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InterPro;
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HSSP;
                                                                                                                                                                                                                                                                                                                               Serine protease.
SEQUENCE 720 P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MGD; MGI:2445082; E430002G05Rik.
GO; GO:0005615; C:extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer."; Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro;
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P00736; 1
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| IPR000742;
| IPR006209;
| IPR006210;
| IPR006210;
| IPR001254;
| IPR001314;
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                                                                                                                                                                VVGYTIPCCRNEENECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAGW
   SSPCFHDGTCVLDKAGSYKCACLAGYTGQRCENLLEERNCSDPGGPVNGYQKITGGPGLI
                                               YVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITACS
                                                                                        YGGDCMRCGQVLRASKGQILLESYPLNAHCEWTIHARPGFIIQLRFGMLSLEFDYMCQYD
                                                                                                       YGGDCMRCGQVLRAPKGQILLESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYMCQYD
                                                                                                                                                  VVGYTIPCCRNEDNECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAGW
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                                YVEVRDGDNSDSPIIKRFCGNERPAPIRSTGSSLHVLFHSDGSKNFDGFHAVFEEITACS
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BAC40098.1; -.
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; IEGF.
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Peptidase_S1A.
Pept Ser_Cys.
Sushi_SCR_CCP.
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Pred. No. 1.6e
33; Mismatches
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                                                                                                                                         RC STRAIN-CZECH II; TISSUB-Mammary tumor;

RM MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Alteschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Medin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brass.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Hilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Hikkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Rodriguez A.C., Skalska U., Smallus D.E., Schnerch A., Schein J.E.,

RA Rodriguez G. Grimwood J., Schmutz J., Myers R.M., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q8K2B8 PRELIMINARY; PRT; 720 AA.

Q8K2B8;
Q1-QCT-2002 (TrEMBLrel. 22, Created)
01-QCT-2002 (TrEMBLrel. 22, Last sequence update)
25-QCT-2004 (TrEMBLrel. 28, Last annotation update)
Regeneration associated muscle protease.
SEQUENCE FROM N.A.
STRAIN=CZECH II; TISSUE=Mammary
Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN CZECH II; T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Name=E430002G05Rik;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
                                                                          Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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etazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
etheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Pfam; PF000008; EGF; 1.

R Pfam; PF00008; Sushi; 1.

R Pfam; PF000089; Trypsin; 1.

R Pfam; PF00089; Trypsin; 1.

R PROSITE; PS001100; CUB; 1.

R PROSITE; PS011106; EGF 1; 1.

R PROSITE; PS01106; EGF 2; 1.

R PROSITE; PS50026; EGF 3; 1.

R PROSITE; PS50026; EGF 3; 1.

R PROSITE; PS50923; SUSHI; 2.

R PROSITE; PS5093; SUSHI; 2.

R PROSITE; PS5093; TRYPSIN DOM; 1.

SEQUENCE 720 AA; 80377 MW; 7172B7F1E690FDOE CRC64;
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Best Local
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InterPro; IPR000742; EGF 2.
InterPro; IPR0006209; EGF like.
InterPro; IPR001254; PepTidase S1.
InterPro; IPR001314; PepTidase S1A.
InterPro; IPR009003; Pept Ser Cys.
InterPro; IPR000436; SushI_SCR_CCP.
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-i- SIMILARITY: Belongs to
EMBL; BC031841; AAH31841.1
EMBL; BC057685; AAH57685.1
HSSP; P00736; IGPZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MGD; MGI:2445082; E430002G05Rik.
GO; GO:0005615; C:extracellular space;
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649; Conservative 33
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                                                                                                                  PMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGDLPMGYQHLHTQLQYECISPFYR
                                                                                                                                                                                                                                                                                                              YGGDCMRCGQVLRASKGQILLESYPLNAHCEWTIHARPGFIIQLRFGMLSLEFDYMCQYD
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                                                                                                   SMOVOSRETPLHOLYSTAFSKOKLODASTKKPALPFGDLPPGYQHLHTQVQYECISPFYR
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; Pred. No. 1.6e-262;
33; Mismatches 38;
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X KIRAUSHER Z.J., Feingold E.A., Grouse L.H., Derge J.G.,

X Klausher R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

X Klausher R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

X Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

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X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Wullahy S.J.,

X Haha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Raha S.S., Loquellano N.A., Peters G.J., Makek J.A., Gunaratne P.H.,

X Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

X Halley J., Helton E., Ketteman M., Madan A., Gay L.J., Hulyk S.W.,

X Pahey J., Helton E., Ketteman M., Madan A., Schein S., Sanchez A.,

X Halkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

X Halkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

X Halkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Touchman J.W., Green E.D., Schnerch A., Schein J.E.,

X Halkesley R.W., Sanches R.W., Schein J.E.,

X Halkesley R
                                                                                                        Submitted (JUN-2004) to the EMBL/GenBank/DDBJ dat
-!- SIMILARITY: Contains 1 EGF-11ke domain.
EMBL; BC075430; AAH75430.1; --
GO; GO:0005509; F:calcium ion binding; IEA.
GO; GO:0004295; F:trypsin activity; IEA.
GO; GO:0004295; P:proteclysis and peptidolysis; 1
InterPro; IPR000859; CUB.
InterPro; IPR000859; CUB.
InterPro; IPR000142; EGF 2.
InterPro; IPR001881; EGF Ca.
InterPro; IPR001881; EGF Tike.
InterPro; IPR001881; EGF Tike.
InterPro; IPR006210; IEGF
InterPro; IPR001254; Peptidase S1.
InterPro; IPR001354; Peptidase S1.
InterPro; IPR000436; Sushi_SCR_CCP.
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Q6DIV5;
PRELIMINARY;
Q5DIV5;
25-OCT-2004 (TrEMBLrel. 2
25-OCT-2004 (TrEMBLrel. 2
25-OCT-2004 (TrEMBLrel. 2
MGC89196 protein.
Name=MGC89196;
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Submitted
     Pfam;
Pfam;
Pfam;
Pfam;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jones S.J., Marra M.A.;
"Generation and initial analysis
and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=8364;
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  PF000431;
PF00008;
PF00084;
PF00089;
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; CUB; 1.
; EGF; 1.
; Sushi; 2.
; Trypsin; 1.
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Last annotation update)
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SMART; SM00042; CUB; 1.

SMART; SM00101; EGF; 2.

SMART; SM001019; EGF CA; 1.

SMART; SM001020; Tryp SPC; 1.

PROSITE; PS00120; CUB; 1.

PROSITE; PS00126; EGF 1; 1.

PROSITE; PS00186; EGF 3; 1.

PROSITE; PS50026; EGF 3; 1.

SMOOTH SPCON SMOOTH S
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Pred. No. 2.9e
10; Mismatches
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.9e-203;
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Best Local S
Matches 389
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-1- SIMILARITY: Belongs to peptidase family S1.
EMBL; AR370388; ARA015224.1; -.
HSSP; P00734; 1BB0
GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:0004283; F:peptidase activity; IEA.
GO; GO:0004285; F:trypsin activity; IEA.
GO; GO:0004285; F:trypsin activity; IEA.
GO; GO:0006508; P:proteolysis and peptidolysis;
InterPro; IPR001254; Peptidase S1A.
InterPro; IPR001314; Peptidase S1A.
InterPro; IPR00903; SUSHI; I.
PROSITE; PS50923; SUSHI; I.
PROSITE; PS50923; SUSHI; I.
PROSITE; PS50923; SUSHI; I.
PROSITE; PS509240; TRYPSIN DOM; I.
Hydrolase; Pstotease; Serine protease.
SEQUENCE 417 AA; 46703 MW; 2546A52A3697C1C4
 Q9Y432;
Q9Y432;
01-NOV-1999
01-NOV-1999
01-MAR-2004
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Q71RE9;
05-JUL-2004
05-JUL-2004
05-JUL-2004
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Mammalia; Eutheria;
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389; Conserv
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                                                                                                                                                                                                          NDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSF
                                                                                                                                                                                                                                                                  PILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQESHITVAGWNVLADVRSPGFK
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                                                                                                                                                                                          NDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSF
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                                                                                                                                  PGRAS PEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWI ERNMK
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Gu J.R.;
 (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
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ilarity 95.6%;
Conservative
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(TrEMBLrel. 27, Last annotation updat
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Created)
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Pred. No. 3.5e-146;
1; Mismatches 17;
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                                                           PRT;
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k MEDLINE=21955715; PubMed=11958140;
wang D., Liu J., Chen L., Wang L., Yang G., Wu X., Zl
wang D., Liu J., Chen L., Wang L., Yang G., Wu X., Zl
r(loning and expression of Tachypleus tridentatus face
Acta Biochim. Biophys. Sin. 34:77-82(2002).
-!- SIMILARITY: Belongs to peptidase family S1.
EMBL; AF467804; AAL75577.1; -.
RSSP; P00746; IFDP.
RSSP; P00746; IFDP.
GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:0008233; F:peptidase activity; IEA.
GO; GO:000529; F:sugar binding; IEA.
GO; GO:000529; F:sugar binding; IEA.
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GO; GO:0008233; F: peptidase activity; IEA.

GO; GO:0004295; F: trypsin activity; IEA.

GO; GO:0006508; F: protectly sis and peptidolysis; IEA.

InterPro; IPR001254; Peptidase S1.

InterPro; IPR001254; Peptidase S1.

InterPro; IPR009003; Pept Ser Cys.

Pfam; PF000089; Trypsin; 1.

SMART; SM00020; Tryp SPc; 1.

PROSITE; PS50240; TRYPSIN_DOM; 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tachypleus tridentatus (Japanese horseshoe crab).
Eukaryota; Metazoa; Arthropoda; Chelicerata; Merc
Limulidae; Tachypleus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
Factor C precursor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8T9S1;
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Mammalia; Eutheria;
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EMBL/GenBank/DDBJ databases
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Best Local Sim
Matches 223;
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SMART; SM00602; Tryp_Scc; 1.

PROSITE; PS50041; C_TVBE_LECTIN_2; 1.

PROSITE; PS50022; EGF_1; UNKNOWN_1.

PROSITE; PS50026; EGF_3; 1.

PROSITE; PS50029; IG_MHC; UNKNOWN_1.

PROSITE; PS50029; ICCL; 1.

PROSITE; PS50023; SUSH1; 5.

PROSITE; PS50024; TRYPSIN_DOM; 1.

PROSITE; PS500134; TRYPSIN_HIS; UNKNOWN_1.

PROSITE; PS500134; TRYPSIN_HIS; UNKNOWN_1.

PROSITE; PS500134; TRYPSIN_HIS; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hydrolase;
SIGNAL
CHAIN
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SMART; SM00032; CCP; 5.
SMART; SM00034; CLECT; 1.
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Pfam;
Pfam;
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PF00084; Sushi; 3.
PF00089; Trypsin;
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SM00181; EGF; 1.
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c; IPR001254; Peptidase_S1.
c; IPR001314; Peptidase_S1A.
c; IPR009003; Pept_Ser_Cys.
c; IPR000436; Sushi_SCR_CCP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
RRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD--
                                      CSLTAGTVWGTAIYHELSSVCRAAIHAGKLPNSGGAVHVVNNGPYSDFLGSDLNGIKSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PGAEWNIM----CRECCEYDQIE----CVCPGKREVVGYTIPCCRNEENECDSCLIHPGCT
                                                                                 GLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIK--ACREPKISDLV
                                                                                                                   NETNCVYLDIRDOLOPVWKTKSCFQPSSFACMMDLSDRNKAKCDDPGSI
                                                                                                                                                        HDGTCV-LDKAGS----YKCACLAGYTGQRCENLLEERN---CSDPGGPVNGYQKITGGP
                                                                                                                                                                                        LDKDVIPSSLTEALRGKGLTTTWIGLHRLDAEKPFVWELMDRSNVVLNDNLTFWASGEPG
                                                                                                                                                                                                                                                             LKSLARSFREDYVSSSTAGRSGCPDGWFEVEENCVYVTSKQRAWERAQGVCTNMAARLAV
                                                                                                                                                                                                                                                                                               LRFVMLSLEFDYM-----CQYDYVEVRD-----GDNRDGQIIKRVCGN--ERPAP
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                                                                                                                                                                                                                                                                                                                                                                                                       CSGNYFLMGFNTLKCNLDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIHCPAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     --DDFYVKGFYCAECR--AGWYGG--DCMR-------
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                                                                                                                                                                                                                           IQS--IGSSLHVLFHSDG-SKNFDGFH-----
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1 25 Potential.
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25.6%;
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Pred. No. 5.5e-42;
7; Mismatches 308
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              - SIMILARITY: 1
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- SIMILARITY: 0
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- SIMILARITY: 0
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"Limulus factor C. An endotoxin-sensitive a mosaic structure of complement-like, ep
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Biol. Chem. 266:6554-6561(1991).

Biol. Chem. 266:6554-6561(1991).

FUNCTION: This enzyme is closely associated with an endotoxin-
property in the enzyme is closely associated with an endotoxin-
property in the enzyme is closely associated with an endotoxin-
roles in both hemostasis and host defense mechanisms. Its active
roles in both hemostasis and host defense mechanisms. Its active
form catalyzes the activation of factor B.

CATALYTIC ACTIVITY: Selective cleavage of 103-Arg-|-Ser-104 and
124-Ile-|-Ile-125 bonds in Limulus clotting factor B to form
activated factor B. Cleavage of Pro-Arg-|-Xaa bonds in synthetic
                                                                                                                                                                                                               Substrates.

ENZYME REGULATION: Activated by Gram-negative bacterial lipopolysaccharides and chymotrypsin.

SUBUNIT: Heterodimer of a light chain and a heavy chain a disulfide bond.

SUBCELLULAR LOCATION: Secreted in hemolymph.

ALTERNATIVE PRODUCTS:
Event-Alternative splicing; Named isoforms=2;
Name-Long;
IsoId=P28175-2; Sequence=VSP_005413, VSP_005414; IMILARITY: Belongs to the peptidase S1 family. IMILARITY: Contains 1 C-type lectin family domain MILARITY: Contains 1 EGF-like domain. IMILARITY: Contains 1 EGF-like domain. IMILARITY: Contains 5 Sushi (CCP/SCR) domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP----
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 Pfam; PF03815; LCCL; 1.
Pfam; PF00059; Lectin C; 1.
Pfam; PF00084; Sushi; 5.
Pfam; PF00089; Trypsin; 1.
Pfam; PF000722; CHYMOTRYPSIN.
SWART; SM00032; CCE; 5.
SWART; SM00034; CLECT; 1.
SWART; SM00181; EGF; 1.
SWART; SM00603; LCCL; 1.
                                                                                                                                  InterPro; IPR000742; EGF 2:
InterPro; IPR006209; EGF like.
InterPro; IPR006210; IEGF
InterPro; IPR006210; IEGF
InterPro; IPR001304; LCCL.
InterPro; IPR001304; Lectin C.
InterPro; IPR001314; Peptidase S1.
InterPro; IPR001314; Peptidase S1A.
InterPro; IPR009003; Pept Ser Cys.
InterPro; IPR0000436; Sushi SCR CCP.
InterPro; IPR0000436; Sushi SCR CCP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Limulus clotting factor C precursor (EC 3.4.21.84) (FC).
Carcinoscorpius rotundicauda (Southeast Asian horseshoe crab)
Eukaryota; Metazoa; Arthropoda; Chelicerata; Merostomata; Xiphosura;
Limulidae; Carcinoscorpius
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Molecular cloning and sequence analysis of factor C cDNA Singapore horseshoe crab, Carcinoscorpius rotundicauda."; Mol. Mar. Biol. Biotechnol. 4:90-103(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-95268506;
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                                                                                                                                                                                                                                                                                             EMBL; S77063;
HSSP; P00746;
                                                                                                                                                                                                                                                                                                                                                        entities requires
                                                                                                                                                                                                                                                                                                                                                                        modified and this statement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ding J.L., Navas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=6848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                          tities requires a license agreement (S send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUNCTION: This enzyme is closely associated with an endotoxinsensitive hemolymph coagulation system which may play important roles in both hemostasis and host defense mechanisms. Its active form catalyzes the activation of factor B.

CATALYTIC ACTIVITY: Selective cleavage of 103-Arg-|-Ser-104 and 124-I1e-|-I1e-125 bonds in Limulus clotting factor B to form activated factor B. Cleavage of Pro-Arg-|-Xaa bonds in synthetic
                                                                                                                                                                                                                                                                                                                                                                     s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation European Bioinformatics Institute. There are no restrictions on it by non-profit institutions as long as its content is in no wifified and this statement is not removed. Usage by and for commercial field and this statement is not removed.
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E; PS50240; TRYPSIN_DOM; 1.

E; PS00134; TRYPSIN_HIS; 1.

E; PS00135; TRYPSIN_SER; 1.

dhesion; EGF-like domain; G
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$ pS00615; C_TypE_LECTIN_1; FALSE_NEG.

$ pS50041; C_TypE_LECTIN_2; 1.

$ pS00022; EGF_1; 1.

$ pS00022; EGF_2; FALSE_NEG.

$ pS01186; EGF_2; FALSE_NEG.

$ pS50026; EGF_3; 1.

$ pS50020; LCCL; 1.
                                                                                                                                                                                     Similarity
                                                                                                                                                           PGAEWNIMCRECCEYDQIECVCPGKRE------VVGYTIPCCRNEENECDSCLIH
                                                  APKGOILLES-----YPLNAHCEWTIHA----KPGFVI
                                                                                                                        PGCTIFENCKSCR-NGSWGGTL----
                                                                                                                                          PNGQWSNFPPKCIR---
KSEELKSLARSFRFDYVRSSTAGKSGCPDGWFEVDENCVYVTSKQRAWERAQGVCTNMAA
                                 CPAGCSLTAGTVWGTAIYHELSSVCRAAIHAGKLPNSGGAVHVVNNGPYSDFLGSDLNGI
                                                                    VTYTCSGNYFLMGFDTLKCNPDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIH
                                                                                     -----DDFYVKGFYCAECR--AGWYGG--DCMR-----
                                                                                                       PYYLIGOETLTCQGNGQWNGQIPQCKNLVFCPDLDPVNHAEHKVKIGVEQKYGQFPQGTB
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By similarity.

N-linked (GlcNAc. . .)

N-linked (GlcNAc. . .)
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By similarity.
                                                                                                                                          -ECAMVSSPEHGKVNALSGDMIEGATL-----RFSCDS----
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Sushi 3.
LCCL.
C-type lectin.
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Limulus clotting
Limulus clotting
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Pred. No. 5.
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ne protease; Signal; Sush
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X MEDLINE=95268506; PubMed=7538401;

X MEDLINE=95268506; PubMed=7538401;

A Ding J.L., Navas M.A. III, HO B.na
III "Molecular cloning and sequence analysis of factor C cDNA
III "Molecular cloning and sequence analysis rotundicauda.";

III Singapore horseshoe crab, Carcinoscorpius singipsi
III Singapore horseshoe crab, Carcinoscorpius septidolysis; IEA.

III Singapore horseshoe crab, Carcinoscorpius rotundicauda.";

III Singapore horseshoe crab, Carcinoscorpius rotundica
                      Q26423;
Q26423;
01-NOV-1996
01-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Arthropoda; Chelicerata; Merostomata; Xiphosura; Limulidae; Carcinoscorpius.
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Factor C.
                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=6848;
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(TrEMBLrel. 01, Last sequence update)
(TrEMBLrel. 26, Last annotation update)
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Best Local
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PROSITE; PS50041; C TypE LECTIN 2; 1

PROSITE; PS50022; EGF 1; UNKNOWN 1.

PROSITE; PS50026; EGF 3; 1.

PROSITE; PS500290; IG MHC; UNKNOWN 1.

PROSITE; PS500290; LCCL; 1.

PROSITE; PS500230; LCCL; 1.

PROSITE; PS500240; TRYPSIN_DOM; 1.

PROSITE; PS500240; TRYPSIN_DOM; 1.

PROSITE; PS500134; TRYPSIN_SER; 1.

Hydrolase; Protease; Serine protease
SEQUENCE 1083 AA; 120227 MW; C82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRINTS; PR007
SMART; SM0003
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Pfam; PF00084; Sushi; 3
Pfam; PF00089; Trypsin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro;
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SM00181;
SM00603;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; IPR004043;
; IPR001304;
; IPR001254;
                                                                                                                                                                                                                                                                                                                         SPCFHDGTCVL----DKAGS-YKCACLAGYTGQRCENLLEERN----CSDPGGPVNGYQKI
                                                                                                                                                                                                                                                                                                GEPGNETNCVYMDIQDQLQSVWKTKSCFQPSSFACMMDLSDRNKAKCDDPGSLENGHATL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---QLRFVMLSLEFDYM------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PYYLIGQETITCQGNGQNNGQIPQCKNLVFCPDLDPVNHAEHKVKIGVEQKYGQFPQGTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PGAEWNIMCRECCEYDQIECVCPGKRE------VVGYTIPCCRNBENECDSCLIH
                      ----KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLG
                                                           VKLPEGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPF
                                                                                                --LPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP-
                                                                                                                                          PSYGSVEIKP---PSRTNSISRVGSPFLRLPRLPLPLARAAKPPPKPRSSQPSTVDLASK
                                                                                                                                                                                 SDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD-----
                                                                                                                                                                                                                      HGQS--IDGFYA--GSSIRYSCEVLHYLSGTETVTCTTNGTWSAPKPRCIKVITCQNPPV
                                                                                                                                                                                                                                                           TGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIK--ACREPKI
                                                                                                                                                                                                                                                                                                                                                                                 RLAVLDKDVIPNSLTETLRGKGLTTTWIGLHRLDAEKPFIWELMDRSNVVLNDNLTFWAS
                                                                                                                                                                                                                                                                                                                                                                                                                      RPAPIQS--IGSSLHVLFHSDG-SKNFDGFH------AIYEEITACSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                               KSEELKSLARSFRFDYVSSSTAGKSGCPDGWFEVDENCVYVTSKQRAWERAQGVCTNMAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CPAGCSLTAGTVWGTAIYHELSSVCRAAIHAGKLPNSGGAVHVVNNGPYSDFLGSDLNGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APKGQILLES-----YPLNAHCEWTIHA----KPGFVI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VTYTCSGNYFLMGFDTLKCNPDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----DDFYVKGFYCAECR--AGWYGG--DCMR-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PNGQWSNFPPKCIR----ECAMVSSPEHGKVNALSGDMIEGATL-----RFSCDS----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protease; Serine protease.
1083 AA; 120227 MW; C82CC45A5CF9FCB7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132; CCP; 5.
134; CLECT; 1.
181; EGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 larity 25.4%; Pred. No. 5.6e-41; Conservative 118; Mismatches 304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22;
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Peptidase_SYA.
Pept Ser_Cys.
Sushi_SCR_CCP.
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Pred. No. 5.6e-41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UNKNOWN_1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1083;
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Lega H., Ka

Lose-binding lectin-c.

Lose-binding lect
          Q RESULT OF CASE OF CA
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HSSP; P00736; IAPQ.
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005509; F:calcium ion binding; IEA.
GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:0004263; F:chymotrypsin activity; IEA.
GO; GO:000529; F:susyar binding; IEA.
GO; GO:000529; F:susyar binding; IEA.
GO; GO:0006956; F:trypsin activity; IEA.
GO; GO:0006956; F:complement activity; IEA.
GO; GO:0006956; F:complement activity; IEA.
GO; GO:0006956; F:complement activity; IEA.
InterPro; IPR00152; Asx_hydroxyl_S.
R InterPro; IPR001859; CUB.
R InterPro; IPR001859; CUB.
R InterPro; IPR001854; Peptidase_S1.
InterPro; IPR001254; Peptidase_S1A.
InterPro; IPR001361; Pept S1_Comp_Act.
DR InterPro; IPR001361; Pept S1_Comp_Act.
DR InterPro; IPR001033; Pept Ser_CyB.
InterPro; IPR001033; Pept Ser_CyB.
InterPro; IPR001033; SushI_SCR_CCP.
Pfam; PF00431; CUB; 2.

Pfam; PF00008; EGF; 1.

Pfam; PF000084; Sushi; 2.

Pfam; PF00089; Trypsin; 1.

PIRSF; PIRSF001155; C1r C1s MASP; 1.

PRINTS; PR00722; CHYMOTRYPSIN.

SMART; SM00042; CCB; 2.

SMART; SM00042; CUB; 2.

SMART; SM00042; Tryp_SPC; 1.
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SEQUENCE FROM N.A.
TISSUE-Notochord;
MEDLINE-22593355; PubMed=12707349;
MEDLINE-22593355; PubMed=12707349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Endo Y., Nonaka M., Saiga H., Kakinuma Y., Ma
Matsushita M., Fujita T.;
"Origin of mannose-binding lectin-associated
and MASP-3 involved in the lectin complement
the invertebrate, amphioxus.";
J. Immunol. 170:4701-4707 (2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2003 (TrEMBLrel. 24,
01-JUN-2003 (TrEMBLrel. 24,
01-MAR-2004 (TrEMBLrel. 26,
Mannose-binding lectin assoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=7741;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Branchiostoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Branchiostoma belcheri
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LMGLVSWSYDKTCSH-RLSTAFTKVLPFKDWIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Amphoxius).
ordata; Cephalochordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 24, Last sequence update)
. 26, Last annotation update)
associated serine protease-1
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          RESULT 14
Q868H5
ID Q868H5
AC Q868H5;
DT 01-JUN-2003
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Best Local
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EGF-like
SEQUENCE
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PROSITE;
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TE; PS01180; CUB; 2.

TE; PS01186; EGF_2; 1.

TE; PS01187; EGF_A; 1.

TE; PS01187; EGF_A; 1.

TE; PS0023; SUSHI; 2.

TE; PS00134; TRYPSIN_DOM; 1.

TE; PS00134; TRYPSIN_HIS; UNKNOWN_1.

TE; PS00135; TRYPSIN_SER; 1.

TE; PS00135; TRYPSIN_SER; 1.

TE; PS00135; TRYPSIN_SER; 1.

TE; PS00135; TRYPSIN_SER; 1.
                                                                                                                                                                                        656
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IPCCRNEENECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAG-WYGGD
                                                                                                                                                                                                                                                                                                                                                                                      SEEEATATLVPGREAAVT--GWG----HSDQGFIANELREVFLPLVDTSTCNKTYD----
                                                                                                                                                                                                                                                                                                                                                                                                                   ASRDLSTSF---QESHITVAGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGI
: : : : : | : | | | | : : :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LGKF-YRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --YRC-DQFYEMAGEGTRFCEADGKWTGNEPSCKPTCGKPEFVTRGKLVGGRPAMRGAWP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAPKTQGLR-----WP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---ELVNCGPLP-NISNGEIEVDGNFS--------YADIAI----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGDLPMGYQHLHTQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YQKITGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RATYFT---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HAIYEEITACSSSPCFHDGTCVLDKAGSYKCACLAGYTGQRCENLLEERNCSDPGGPVNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EQHPEVSCPYDHLKVQAGDEKYGP----YCGKTVPPTITSTDHKVHVPFHSDDSGENKGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---C-MRCG-QVLRAPKGQILLES----YPLNAHCEWTIHAKPGFVIQLRFVMLSLEFD-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VHYRVVDRDEC--AVDNGGCHHF----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CEYDYVKVMEGDKLVGLFCGTEDTDTEKVPGDRVIESTGSQLSLEFKSDFSNVDRHKGFV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KNKYGVYTNVIQYLPWIDEVM
                                                                                                                                                                                                                                                                                       -FTVTSDMICAGFQ
                                                                                                                                                                                                                                                                                                                                   PVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WMAMLHRTPRGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----YMCQYDYVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGF
                                                                                                                                                                                                                                         RLS-TAFTKVLPFKDWIERNM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----AYGTMEGSNFTYSQKVSFACGEGYYLDGPDHRVCQADGSWSGVQPTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LGKHKARDKDTTEQTV---QVAQIVVHPAFNFTTFLADIALLKLESPARLNPYITPICLL
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                 (TrEMBLrel.
                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----TARPCEAL-----SAP-----
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                 24,
                                                                                                                                                                                                                                                                                          ·EGGKDACRGDSGG--PLAFFERTA--EKWVQGEVVTWGWG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92;
                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----FCGGTLLGDQWVLTAAHCLVSPVTSDPILKDSFSVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 608.5; DB 2;
Pred. No. 5.5e-37;
2; Mismatches 239;
                                                                PRT;
                                                                                                                                                                                        676
                                                                  680
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                                                                                                                                                                                                      Query Match
Best Local S
Matches 186
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R PIRSF; PIRSF001155; Clr Cle MASP; 1.

PRINTS, PR00722; CHYMOTRYPSIN.
SMART; SM00032; CCP; 2.
SMART; SM00042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR000152; A
InterPro; IPR001851; E
InterPro; IPR001881; E
InterPro; IPR001209; E
InterPro; IPR001254; P
InterPro; IPR001351; P
InterPro; IPR01361; P
InterPro; IPR009003; P
InterPro; IPR009003; P
InterPro; IPR0000436; S
                                                                                                                                                                                                     PROSITE;
EGF-11ke
SEQUENCE
                                                                                                                                                                                                                                                                   PROSITE;
PROSITE;
PROSITE;
PROSITE;
PROSITE;
                                                                                                                                                                                                                                          PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2003 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
Mannose-binding lectin
                                                                                                                                                                                                                                                                                                                                            SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=22593355; PubMed=12707349; MEDLINE=22593355; PubMed=12707349; Endo Y., Nonaka M., Saiga H., Kakinuma Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Branchiostoma.
                                                                                                                                                                                                                                                                                                                                SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Branchiostoma belcheri (Amphoxius)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Name=MASP1/3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Origin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G0:0005576; C:extracellular; IEA.
G0:0005509; F:calcium ion binding; IEA.
G0:0004263; F:chymotrypsin activity; IEA.
G0:0008233; F:peptidase activity; IEA.
G0:0008233; F:sugar binding; IEA.
G0:0005529; F:sugar binding; IEA.
G0:0004295; F:trypsin activity; IEA.
G0:0004295; F:complement activation; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunol. 170:4701-4707(2003).
SIMILARITY: Belongs to peptidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    igin of mannose-binding lectin-associated serine WASP-3 involved in the lectin complement pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GO:0006508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invertebrate, amphioxus."
                                                                                                                                                                                                             T; SM00032; CCP; 2.
T; SM00042; CUB; 2.
T; SM00042; CUB; 2.
T; SM0000179; EGF_CA; 1.
ITE; PS00100; ASX HYDROXYL;
ITE; PS001100; ASX HYDROXYL;
ITE; PS01180; CUB; 2.
ITE; PS01180; EGF_CA; 1.
ITE; PS01180; EGF_CA; 1.
ITE; PS01180; EGF_CA; 1.
ITE; PS00130; SUSHI; 2.
ITE; PS00313; TRYPSIN_DOM; 1
ITE; PS00135; TRYPSIN_SER; 1
Ike domain; Hydrolase; Lect; CCP; PS000135; TRYPSIN_SER; 1
                                                     196
                                                                                                                                                      186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P00736; 1APQ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AB089507;
                                                                                                                                                                  Similarity .
                                                  DHLKIQAGDEKYGP----CCGKTVPPTITSTDHNMRVFFHSDDSGENKGFRATYFT----
                           DYVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITAC
                                                                                                   DECAVDNGGCHHF----
                                                                                                                           DSCLI-HPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAG-WYGGD---C-MRCG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M., Fujita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PR000152; Asx hydroxyl_S.
PR0000559; CUB.
                                                                                                                                                                                                       680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel. 24, Last (TrEMBLrel. 26, Last
                                                                                                                                                       Conservative
                                                                                                                                                                                                      $
                                                                                                                                                                                                                                                                                                                                                                                                                                   EGF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P:complement activation;
P:proteolysis and peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BAC75888.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      EGF Ca.

EGF 11ke.

PEPT 1dase S1.

Pept dase S1A.

Pept S1 Comp Act.

Pept Ser Cys.

Sushi SCR CCP.
                                                                                                                                                                                                     75394 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata; Cephalochordata; Branchiostomidae;
                                                                                                                                                    15.3%; Score 604; DB 2; 27.6%; Pred. No. 1.2e-36; tive 80; Mismatches 229
                                                                                                                                                                                                                                                                                                                  HYDROXYL; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          associated
                                                                                                   -CHN-----YISGYYCS-CRAGYWIMKDRETCKFGCGR
                                                                                                                                                                                                     Lectin; Protease; So
                                                                                                                                                                                                                               UNKCHOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence update) annotation updat descrine protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tion update)
s protease-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matsusita
                                                                                                                                                     229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pathway
                                                                                                                                                                                                               Serine protease
                                                                                                                                                                           Length 680;
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01-JUN-2003 (TrEMBLrel.
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                                                                                                                                                    J. Immunol. 170:4701-4707(2003).
                                                                                                                                                                                        Endo Y., Nonaka M., Saiga H., Matsushita M., Fujita T.; "Origin of mannose-binding le
                                                                                                                                                                                                                            TISSUE=Notochord;
MEDLINE=22593355; PubMed=12707349;
                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                           Branchiostoma.
NCBI_TaxID=7741;
                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                Name=MASP-3;
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            50; GO:0005576; C:extracellular; IEA.
10; GO:0005509; F:calcium ion binding; IEA.
10; GO:0004263; F:chymotrypsin activity; IIA.
10; GO:0008233; F:peptidase activity; IEA.
10; GO:0005529; F:sugar binding; IEA.
10; GO:0004295; F:trypsin activity; IEA.
10; GO:0006956; P:complement activation; IIO; GO:0006508; P:proteolysis and peptidol
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 956; P:complement activation; 508; P:proteolysis and peptid. PR000152; Asx_hydroxyl_S.
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R InterPro; IPR006209; EGF_Cia.

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InterPro; IPR001234; Peptidase_S1A.

InterPro; IPR001314; Peptidase_S1A.

InterPro; IPR001314; Peptidase_S1A.

InterPro; IPR001314; Peptidase_S1A.

InterPro; IPR001316; Pept_S2_CCP.

Pfam; PP00043; CUB; 2.

Pfam; PP00084; Sushi_SCR_CCP.

Pfam; PP00089; Trypsin; 1.

R Pfam; PP00089; Trypsin; 1.

R PINTS; PR00772; CHYMOTRYPSIN.

R PINTS; PR00722; CCP; 2.

R SMART; SM00002; CCP; 2.

R SMART; SM00012; CCP; 2.

R SMART; SM000179; EGF CA; 1.

R PROSITE; PS01180; CUB; 2.

R PROSITE; PS01180; CUB; 2.

R PROSITE; PS01186; EGF_2; 1.

R PROSITE; PS01186; EGF_2; 1.

R PROSITE; PS01186; EGF_2; 1.

R PROSITE; PS00136; TRYPSIN_DOM; 1.

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                         520 LKVVLGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARISTRVQPI 579
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                                                                                                    PWQAAIYRRTSGVHDGSLHKGAWFL---VCSGALVNERTVVVAAHCVTDLGKVTMIKTAD 519
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                                                                               PWQAMV-----GENDILPTGY
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                                                     --- DYPVTGNMLCAGLR-IGGKDSCDGDSGGPLLFQDPDTT----RFYVAGLVSWGEPSE
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i Sequence 9, Application US/10067422

patent No. 6743613

i GENERAL INFORMATION:

APPLICANT: Ni et al.

TITLE OF INVENTION: Bone Morphogenic Protein (BM TITLE OF INVENTION: Antibodies

PILE REFERENCE: PT004P1

CURRENT APPLICATION NUMBER: US/10/067,422

CURRENT APPLICATION NUMBER: US/202-07

PRIOR APPLICATION NUMBER: PCT/US00/09028

PRIOR FILING DATE: 2000-004-06

PRIOR APPLICATION NUMBER: 60/152,933

PRIOR FILING DATE: 1999-09-09

PRIOR APPLICATION NUMBER: 60/147,020

PRIOR APPLICATION NUMBER: 60/147,020

PRIOR APPLICATION NUMBER: 60/131,672

PRIOR APPLICATION NUMBER: 60/131,673

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PRIOR APPLICATION NUMBER: 60/131,673
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                                                                                                                                                                                                                                          MLSLEFDYMCQYDYYEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFD
                                                                                                                     SLSVLEERNCSDPGGPVNGYQKITGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQ
                                                                                                                                                                                                                           MLSLEFDYMCQYDYVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFD
                                                                QNGEWSGKQPICIKACREPKISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQSAPTK
                                                                                                                                                                                                                                                                              74.7%;
ilarity 96.8%;
Conservative
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US-09-961-403-7

US-09-962-702A-12

US-09-562-702A-4

US-09-562-702A-10

US-09-562-702A-2

US-09-562-702A-2

US-09-561-702A-6

US-09-951-702A-6

US-09-917-254-86

US-09-949-016-5937

US-08-460-309-4

US-08-125-077-4
                                                                                                                                                                                                                                                                             Score 2946.5; DB 4
Pred. No. 9.5e-237;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALIGNMENTS
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                                                                                                                                                                                                                                                                                Indels
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7, Appli
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4, Appli
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7, Appli
86, Appli
937, Ap
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US-08-296-014A-4
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                                                                                                                                                                      ; MOLECULE TYPE: protein US-08-296-014A-4
                                                                                                                                                                                                    TELEFAX: (703) 205-8050
TELEX: 248345
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 1019 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/08296014A
Patent No. 5716834
GENERAL INFORMATION:
                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                     NAME: Murphy, Jr., Gerald M.
REGISTRATION NUMBER: 28,977
REPERENCE/DOCKET NUMBER: 1781-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
TELEFAX: (703) 205-8050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22042
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Din
                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1. CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 811
CITY: Falls
STATE: Virg
COUNTRY: US
ZIP: 22042
                                                                                                    Local Sin
hes 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
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83
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T: 8110 Gatehouse Road, Suite 500 East
Falls Church
Virginia
                                                                                                                    Similarity
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PGCTIFENCKSCR-NGSWGGTL----
                                 PNGQWSNFPPKCIR----ECAMVSSPEHGKVNALSGDMIEGATL-----RFSCDS----
                                                                   PGAEWNIMCRECCEYDQIECVCPGKRE------VVGYTIPCCRNEENECDSCLIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
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                                                                                                 16.9%; Score 665; DB 1; Length 1019; llarity 25.4%; Pred. No. 1.7e-46; Conservative 118; Mismatches 304; Indels 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jeak Ling
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SR: 1781-105P
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                          GENERAL INFORMATION:
APPLICANT: Ding, Jeak Ling
APPLICANT: Ding, Jeak Ling
APPLICANT: Ho, Bow
ITILE OF INVENTION: The Cloned
ITILE OF INVENTION: Singapore |
ITILE OF INVENTION: rotundicau
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSE: Birch, Stewart, KC
STREET: 8110 Gatehouse Road,
CITY: Falls Church
                                                                                                                                                                                                                                                             US-08-596-405-4
                                                                                                                                                                                                                         Sequence 4, Application US/08596405 Patent No. 5858706
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                                                                                                                                                                                                                                                                                                                                                              LMGLVSWSYDKTCSH-RLSTAFTKVLPFKDWIER 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TLTTRVQPICLPT--DITT---REHLKEGTLAVVTGWG----LNENNTYSETIQQAVLPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TABIIDPNQFKMYLGKYYRDDSRDDDYVQVREALBIHVNPNYDPGNLNFDIALIQLKTPV 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KVTMIKTADLKVVIGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKA 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VKLPEGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPF 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --LPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIK--ACREPKI 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GEPGNETNCVYMDIQDQLQSVWKTKSCFQPSSFACMMDLSDRNKAKCDDPGSLENGHATL
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   Virginia
Y: USA
                                                                                                                                                                                                                                                                                                                              LEGIVSWGSPSGCGKANQYGGFTKVNVFLSWIRQ 1017
                                                                                                                                                                                                                                                                                                                                                                                               VAASTCEEGYKEADLPLTVTENMFCAGYK-KGRYDACSGDSGG--PLVFADDSRTERRWV
                                                                                                                                                                                                                                                                                                                                                                                                                               VDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWH 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RISTRVOPICLAASRDLSTSFQESHI-----TVAGWNVLADVRSPGFKNDTLRSGVVSV 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IWNGNSTEIGQWPWQAGISRWLA------DHNMWFLQCGGSLLNEKWIVTAAHCVTYSA 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSYGSVEIKP---PSRTNSISRVGSPFLRLPRLPLPLARAAKPPPKPRSSQPSTVDLASK 702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HGQS--IDGFYA--GSSIRYSCEVLHYLSGTETVTCTTNGTWSAPKPRCIKVITCQNPPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RLAVIDKDVIPNSITETIRGKGITTWIGIHRIDAEKPFIWEIMDRSNVVINDNITFWAS
                                                                                                                    The Cloned Factor C cDNA of the Singapore Horseshoe Crab, Carcinoscorpius rotundicauda and Purification of Factor C
                                                     Road,
                                                     Kolasch & Birch
d, Suite 500 Eas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----AIYEEITACSS
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; MOLECULE TYPE: protein
US-08-596-405-4
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 4:
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LENGTH: 1019 amino acids
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REGISTRATION NUMBER: 28,977
REFERENCE/DOCKST NUMBER: 1781-105P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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  763
                                          456
                                                                                                                                                                                                                                                                                                       294 TGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIK--ACREPKI 351
                                                                                                                                                                                                                                                                                                                                                 530 GEPGNETNCVYMDIQDQLQSVWKTKSCFQPSSFACMMDLSDRNKAKCDDPGSLENGHATL
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IWNGNSTEIGQWPWQAGISRWLA-----DHNMWFLQCGGSLLNEKWIVTAAHCVTYSA
                                        ----KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLG 510
                                                                                     VKLPEGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPF
                                                                                                                             --LPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP-
                                                                                                                                                                                                                  SDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD------
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Patent No.
                                                                                                               Matches
                                                                                                                               Query Match
Best Local Similarity
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APPLICANT: Ding,
APPLICANT: Ho, Bo
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INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 1019 amino acids
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TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                             NAME: Murphy, Jr., Gerald M. REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 178
                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                            TYPE:
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ZIP: 22042
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            876 TLTTRVQPICLPT--DITT---REHLKEGTLAVVTGWG----LNENNTYSETIQQAVLPV
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                                     184 PNGQWSNFPPKCIR----ECAMVSSPEHGKVNALSGDMIEGATL-----RFSCDS----
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 PGCTIFENCKSCR-NGSWGGTL-----
                                                                        PGAEWNIMCRECCEYDQIECVCPGKRE------VVGYTIPCCRNEENECDSCLIH
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8110 Gatehouse Road, Suite 500 East
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Bow
                                                                                                                                                                                                                                                                                                                                          (703) 205-8050
                                                                                                               Conservative 118; Mismatches 304;
                                                                                                                                                                                                                              linear
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                                                                                                                               16.9%; Score 665; DB 2; 25.4%; Pred. No. 1.7e-46;
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                                                                                                                                                                                                                                                                    RESULT 5
US-09-287-368-4
                                                                                                                                                                                                            Sequence 4, Application US/09287368A Patent No. 6645724 GENERAL INFORMATION:
                                               APPLICANT: DING, Jeak Ling
APPLICANT: HO, Bow
APPLICANT: HO, Bow
TITLE OF INVENTION: Assays for Endotoxin and Methods for Removal of Endotoxin
TITLE OF INVENTION: from a Sample Using Recombinant Factor C
FILE REFERENCE: 1781-0165P
CURRENT APPLICATION NUMBER: US/09/287,368A
CURRENT FILING DATE: 1999-04-07
EARLIER APPLICATION NUMBER: 09/201,786
EARLIER APPLICATION NUMBER: 09/201,786
EARLIER FILING DATE: 1998-12-01
EARLIER APPLICATION NUMBER: 09/081,767
EARLIER FILING DATE: 1998-05-21
EARLIER APPLICATION NUMBER: 60/058,816
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; FEATURE:
; OTHER INFORMATION: any n or Xaa = Unkno
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Matches 222; Conserv
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NUMBER OF SEQ ID NOS: 7
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 4
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                                                       VAASTCEEGYKEADLPLTVTENMFCAGYK-KGRYDACSGDSGG--PLVFADDSRTERRWV
                                                                           VDSILCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWH
                                                                                                                           TLTTRVQPICLPT--DITT---REHLKEGTLAVVTGWG----LNENNTYSETIQQAVLPV
                                                                                                                                                            RISTRVOPICLAASRDLSTSFQESHI-----TVAGWNVLADVRSPGFKNDTLRSGVVSV
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 4
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Patent No. 6719973
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APPLICANT: HO, Bow
TITLE OF INVENTION: Use of Recombinant Factor C to Induce Bacteriostasis
FILE REFERENCE: 4810-61737
CURRENT APPLICATION NUMBER: US/09/626,795
CURRENT FILING DATE: 2000-07-26
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TYPE: PRT
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TAEIIDPNQFKMYLGKYYRDDSRDDDYVQVREALEIHVNPNYDPGNLNFDIALIQLKTPV 875
                           KVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKA
                                                                         IWNGNSTEIGQWPWQAGISRWLA-----DHNMWFLQCGGSLLNEKWIVTAAHCVTYSA
                                                                                                                                                   VKLPEGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPF
                                                                                                                                                                                     -- LPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP-
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                                                                                                                                                                                                                                                               SDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD------
                                                                                                                                                                                                                                                                                                      HGQS--IDGFYA--GSSIRYSCEVLHYLSGTETVTCTTNGTWSAPKPRCIKVITCQNPPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----DDFYVKGFYCAECR--AGWYGG--DCMR------
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                                                                                             ----KTQGLRWPWQAAIYRRTSGVHDGSLHXGAWFLVCSGALVNERTVVVAAHCVTDLG
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25.4%; Pred. No. 1.7e-46;
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                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: HO, BOW
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDLIM TYPE: Floppy disk
COMPUTER: LBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/296,014A
                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 17/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Murphy, Jr., Gerald M.
REGISTRATION NUMBER: 28,977
                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 1083 amino aci
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ADDRESSEE: Birch, Stewart, Kolasch & Birch
STREET: 8110 Gatehouse Road, Suite 500 East
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                                                                                                                                                                                                                                                                                                                                 TYPE: ami
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CLASSIFICATION:
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ZIP: 22042
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VTYTCSGNYFLMGFDTLKCNPDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIH
                                    -----DDFYVKGFYCAECR--AGWYGG--DCMR-----
                                                                       PYYLIGQETLTCQGNGQWNGQIPQCKNLVFCPDLDPVNHAEHKVKIGVEQKYGQFPQGTE
                                                                                                           PGCTIFENCKSCR-NGSWGGTL------
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US-08-596-405-2
                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application Patent No. 5858706
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                                                                                                                                                                                                                       APPLICANT: Ding, Jeak Li
APPLICANT: Ho, Bow
TITLE OF INVENTION: The
TITLE OF INVENTION: Sing
TITLE OF INVENTION: rott
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                               COUNTRY: UZIP: 22042
                                                                                                                                                    STATE: Virginia
                                                                                                                                                                   STREET: 8110 Gatehouse Road, CITY: Falls Church
                                                                                                                                                                                       ADDRESSEE: Birch, Stewart, Kolasch & Birch STREET: 8110 Gatehouse Road, Suite 500 East
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Ding,
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INFORMATION FOR SEQ ID NO:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Murphy, Jr., Gerald
REGISTRATION NUMBER: 28,97
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LENGTH: 1083 amino aci
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CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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XGY: linear
RISTRVQPICLAASRDLSTSFQESHI-----TVAGWNVLADVRSPGFKNDTLRSGVVSV
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                                                       TAETIDPNQFKMYLGKYYRDDSRDDDYVQVREALETHVNPNYDPGNLNFDTALTQLKTPV
                                                                                          KVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKA
                                                                                                                                   IWNGNSTEIGQWPWQAGISRWLA-----DHNMWFLQCGGSLLNEKWIVTAAHCVTYSA
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                                                                                                                                                                                                                                                                                   PSYGSVEIKP---PSRTNSISRVGSPFLRLPRLPLPLARAAKPPPKPRSSQPSTVDLASK
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Pred. No. 1.8e-46;
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                                                                                                                                                                                                                           Query Match 16.9%; Score 665; DB 2; Length 1083; Best Local Similarity 25.4%; Pred. No. 1.8e-46; Matches 222; Conservative 118; Mismatches 304; Indels 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: HO, BOW
TITLE OF INVENTION: Singapore Horseshoe
TITLE OF INVENTION: rotundicauda and Pu
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Birch, Stewart, Kolasch &
STREET: 8110 Gatehouse Road, Suite 50
                                                                                                                                                                                                                                                                                                                                                                                TELEX: 248345
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1083 amino acids
                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: MUTPHY, JT., Gerald M.
REGISTRATION NUMBER: 28,977
REFERENCE/DOCKET NUMBER: 1781-105P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Rel
CURRENT APPLICATION DATA:
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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CITY: Falls Church
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (703) 205-80
TELEPAX: (703) 205-8050
                                                                                                                                                                                                                                                                                                                                                                      TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: . Floppy disk
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VTYTCSGNYFLMGFDTLKCNPDGSWSGSQPSCVKVADREVDCDSKAVDFLDDVGEPVRIH
                                    ----DDFYVKGFYCAECR--AGWYGG--DCMR----
                                                                                                              PGCTIFENCKSCR-NGSWGGTL-------
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                                                                          PYYLIGQETLTCQGNGQWNGQIPQCKNLVFCPDLDPVNHAEHKVKIGVEQKYGQFPQGTE
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                                                                                                                                                                                                                               Mismatches 304; Indels 230;
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500 East
                                      ---CGQVLR-- 133
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US-09-287-368-2
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                                                                                                                            GENERAL INFORMATION:
APPLICANT: HO, Bow
APPLICANT: HO, Bow
APPLICANT: HO, Bow
TITLE OF INVENTION: Assays for Endotoxin and Methods for Removal of Endotoxin
TITLE OF INVENTION: from a Sample Using Recombinant Factor C
FILE REPERENCE: 1781-0165P
CURRENT APPLICATION NUMBER: US/09/287,368A
CURRENT FILING DATE: 1999-04-07
EARLIER APPLICATION NUMBER: 09/201,786
EARLIER APPLICATION NUMBER: 09/201,786
EARLIER FILING DATE: 1998-12-01
EARLIER APPLICATION NUMBER: 09/058,816
EARLIER APPLICATION NUMBER: 60/058,816
EARLIER FILING DATE: 1997-09-19
NUMBER FILING DATE: 1997-09-19
                                                                    NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn Ve
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09287368A Patent No. 6645724
TYPE: PRT ORGANISM: Carcinoscorpius rotundicauda
                                                LENGTH:
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; FEATURE:
; OTHER INFORMATION: any n or Xaa = Unknown
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                       RESULT 11
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Sequence 2, Application US/09626795 Patent No. 6719973
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                                                                                                                                                                                                                                     TAETIDPNQFKMYLGKYYRDDSRDDDYVQVREALEIHVNPNYDPGNLNFDIALIQLKTPV
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                                                                                                                                              VDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWH 684
                                                                                                                                                                                                                                                                                                      ----KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLG
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                                                                              LEGIVSWGSPSGCGKANQYGGFTKVNVFLSWIRQ 1081
                                                                                                       LMGLVSWSYDKTCSH-RLSTAFTKVLPFKDWIER 717
                                                                                                                                 VAASTCEEGYKEADLPLTVTENMFCAGYK-KGRYDACSGDSGG--PLVFADDSRTERRWV 1047
                                                                                                                                                                                    TLTTRVQPICLPT--DITT---REHLKEGTLAVVTGWG----LNENNTYSETIQQAVLPV
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ilarity 25.4%;
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4%; Pred. No. 1.8e-46;
118; Mismatches 304; Indels 230;
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; TYPE: PRT ; ORGANISM: Carcinoscorpius rotundicauda US-09-626-795-2
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APPLICANT: HO, Bow
APPLICANT: HO, Bow
TITLE OF INVENTION: Use of Recombinant Factor C to Induce Bacteriostasis
FILE REFERENCE: 4810-61737
CURRENT APPLICATION NUMBER: US/09/626,795
CURRENT FILING DATE: 2000-07-26
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 2
LENGTH: 1083
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VDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWH 684
                                                                                                                                                                               --LPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITAP- 455
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                                                                                 TLTTRVQPICLPT--DITT---REHLKEGTLAVVTGWG----LNENNTYSETIQQAVLPV
                                                                                                                                RISTRVOPICLAASRDLSTSFQESHI-----TVAGWNVLADVRSPGFKNDTLRSGVVSV
                                                                                                                                                                                                                                 KVTMIKTADLKVVLGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKA
                                                                                                                                                                                                                                                                                IWNGNSTEIGQWPWQAGISRWLA------DHNMWFLQCGGSLLNEKWIVTAAHCVTYSA
                                                                                                                                                                                                                                                                                                               ----KTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLG
                                                                                                                                                                                                                                                                                                                                                                                   VKLPEGHYRVGSRAIYTCESRYYELLGSQGRRCDSNGNWSGRPASCIPVCGRSDSPRSPF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQ---SAPTKKPALPFGD-------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPCFHDGTCVL----DKAGS-YKCACLAGYTGQRCENLLEERN----CSDPGGPVNGYQKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RPAPIQS--IGSSLHVLFHSDG-SKNFDGFH-------AIYEEITACSS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative 118; Mismatches 304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16.9%; Score 665; DB 4; 25.4%; Pred. No. 1.8e-46;
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TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES AS:
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF
FILE REFERENCE: CLOO1307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PRILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
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US-09-949-016-6138
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 6138
LENGTH: 699
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 12.2%; Score 482; DB 4; Length 699;
Local Similarity 24.9%; Pred. No. 1.7e-31;
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AIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQE-SHITVAGWNV 603
                                                                                                                                                                                                                                                                                                                                                                     PIC-IKACREPKISDLVRRRVLPMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGD 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ITGGPGLINGRHAKIGTVVSFF-----CNNSY-VLSGNEKR-----TCQQNGEWSGKQ 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YEEITACSSSPCFHDGTCVLDKAGSYKCACLAGYTGQRCENLLEERNCSDPGGPVNGYQK 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRVECSDNLFTQRTGVITSPDFPNPYPKSSECLYTIELEEGFMVNLQFEDI---FDIQDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C-MRCGQVLRAPKGQILL-----ESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYM-- 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CKEREDEELSCDHY------CHN-----YIGGYYCS-CRFGYILHTDNRT 180
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                                           LLGSSWIVTAAHCLHQSLDPGDPTLRDSDLLSPSDFKIILGKHWR--LRSDENEQHLGVK 536
                                                                                       LVNERTVVVAAHCV---TDLGKVT-----MIKTADLKVVLGKFYRDDDRDEKTIQSLQIS 544
                                                                                                                                         LPVCGLPKFSRKLMARIFN-GRPAQKGTT-PWIAML-----SHLNGQPF--CGGS
                                                                                                                                                                                  IPICG------KIENITAPKTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGA
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                                                                                                                                                                                                                                                                                                                                                                                                                      -----GKIEPSQAKY-----FFKDQVLVSCDTGYKVLKDNVEMDTFQIECLKDGTWSNKI 359
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US-09-949-016-11182
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CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR PILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08
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SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 11182
LENGTH: 717
TYPE: PRT
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APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
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Patent No. 6812339
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Best Local Similarity
Matches 176; Conserv
451
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                                                                                                                                                                                                                                                                                                                                                                                                                                              --YMCQYDYVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAI 232
  LPVCGLPKFSRKLMARIFN-GRPAQKGTT-PWIAML-----SHLNGQPF--
                                       IPICG-----KIENITAPKTQGLRWPWQAAIYRRTSGVHDGSLHKGAWFLVCSGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRVECSDNLFTQRTGVITSPDFPNPYPKSSECLYTIELEEGFMVNLQFEDI - - - FDIEDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C-MRCGQVLRAPKGQILL----ESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFD----
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                                                                                                                       LPMGYQHLHT-----GRA-PSC 442
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                                                                                                                                                                   PTCKIVDCRAP----
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                                                                                  LEHGLITFSTRNNLTTYKSEIKYSCQEPYYKMLNNNTGIYTCSAQGVWMNKVLGRSLPTC
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                                                                                                                                                                                                                                                                                                                                      ----SYRAA-----GNECPEL-----QP--PVH----
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RESULT 14
US-09-949-016-7775
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US-09-949-016-7775
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SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 7775
LENGTH: 691
TYPE: PRT
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Patent No. 6812339
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLO01307
FULL REFERENCE: CLO01307
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR PRIOR PRIOR DATE: 2000-10-03
PRIOR PRIOR PRIOR DATE: 2000-10-03
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PRIOR PRIOR DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
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PRIOR FILING DATE: 2000-09-08
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les 173; Conserv
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                                                                                                                             284 GGPVNGYQKITGGPGLINGRHAK--IGTVVSFFCNNSY-VLSG-----NEKRTCQQNGEW
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                                                                                                                                                                                                                                                                                                                                                   132
                                                                                                                                                                                                                                                                                                                                                                                               226 FDGFHAIY--EEITACSSSP-----CFHDGTCVLDKAGSYKCACLAGYTGQR----CENL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 176 MCQYDYVEVRDGDNRDGQIIKRVCGNE----RPAP----IQSIGSSLHVLFHSDGS--KN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128 CGQVLR--APK------GQILLESYP----LNAHCEWTIHAKPGFVIQLRFVMLSLEFDY
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DRPMPACSIVDCGPPD---
                                      SGKQPIC-IKACREPKISDLVRRRVLPM-QVQSRETPLHQLYSAAFSKQKLQSAPTKKPA 393
                                                                                    MAPPNGH-----VSPVQAKYILKDSFSIFCETGYELLQGHLPLKSFTAVCQKDGSW
                                                                                                                                                                        DFLKIQTDREEHGPFCGKTLPHRIETKSNTVTITFVTDESGDHTGWKIHYTSTAQPCPYP
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                                                                                                                                                                                                                      ------RNCSDP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10.1%; Score 399.5; DB 4; 22.6%; Pred. No. 1.3e-24; tive 79; Mismatches 243;
YLPSGRVEYITGPGVTTYKAV---
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; FEATURE;
; OTHER INFORMATION: Amino as
; OTHER INFORMATION: 23 to 2:
; Patent No. 5972616
US-09-027-337-2
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US-09-027-337-2
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LENGTH: 855
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Best Local
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APPLICANT: Tanimoto, Hirotoshi
TITLE OF INVENTION: TADG-15: An Extracellular Serine Protease Overexpressed in
TITLE OF INVENTION: Breast and Ovarian Carcinomas
FILE REFERENCE: D6064
CURRENT APPLICATION NUMBER: US/09/027,337B
CURRENT FILING DATE: 1998-02-20
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
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                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                           504 LFWVCDSVNDCGDNSDEQGCSCP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144;
                                                                                                                                                                                                                                                                                      GTCPKDYVEING------EKYCGERSQFVVTSNSNKITVRFHSDQSYTDTGFLAEY-
                                                                                                                                                                                                                                                                                                                                                                        CGGRLRKAQGTFNSPYYPGHYPPNIDCTWNIE-----VPNNQHVKVSFKFFYLLEPGVPA
                                                                                                                                                                                                                                                                                                                                                                                                                   CGQVLRAPKGQI-----LLESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYM-----
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                                                                                                                                                                                                                                        EITACSSSPCFHDGTC--------VLDKAGSYKCACLAGY------
                                                                                                                                                                                                                                                                                                                                 --CQYDYVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYE
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                                                             LSG----NEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVLPMQVQSRETPLHQLYS
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                    LSKSQQCNGKDDCGDGSDEASCPKVNVVTC----
                                                                                                                                                  -----TGORCENLLEERNCSDPGGPVNGYOKITGGPGLINGRHAKIGTVVSFFCNNSYV 320
                                                                                                                                                                                               -LSYDSSDPCPGQFTCRTGRCIRKELRCDGWADCTDHSDELNCSCDAGHQFTCKNKFCKP
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2589 of Sequence 1
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Pred. No. 1.8e-18;
9; Mismatches 224
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846	712	794	653	742	594	685	534	638	474	585	437	568	377
RDWIKEN 852	KDWIERN 718	-LSGGVDSCQGDSGGPLSSVEADGRIFQAGVVSWG-DGCAQRNKPGVYTRLPLF 845	EPTAPSDICTAETGG	GKAIWVTGWGHTQYGGTGALILQKGEIRVINQTTCENLLPQQITPRNMCVGF 793	SH-ITVAGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASW 652	SAPGVQERRLKRIISHPFFNDFTFDYDIALLELEKPAEYSSMVRPICLPDASHVFPA 741	LLDKARISTR	GHICGASLISPNWLVSAAHCYIDDRGFRYSDPTQWTAFLG-LHDQSQR 684	GVHDGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTMIKTADLKVVLGKFYRDDDR 533	PECDGKEDCSDGSDEKDCDCGLRSFTRQARVVGGTDADEGEWPWQVSLHALGQ 637	GRAPSCIPICGKIENITAPKTQGLR	TK	377 AAFSKQKLQSAPTKKPALPFGDLPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWS 436

Search completed: July 12, 2005, 17:09:15 Job time : 56 BecB

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1 MELGCWTQLGLTFLQLLLIS.
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Gapop 10.0 ,
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(GETH ) GENENTECH INC.
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Human PRO polypeptide #85.
US2003032102-A1.
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Human PRO polypeptide #19.
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US2003032137-A1.
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                       ABR67855 standard; protein;
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US2003008353-A1.
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ABU72127 standard; protein;
Human PRO polypeptide #19.
US2003023042-A1.
                                                         ABU81631 standard; protein; 720 AA. Novel human secreted and transmembrane US2002177164-A1.
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Human PRO polypeptide #19.
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ABO40451 standard;
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US2003068722-A1.
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ABM29080 standard; protein;
Human secreted polypeptide
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US2003059831-A1.
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Human secreted/transmembrane
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US2003069407-A1.
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10-APR-2003.
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10-APR-2003.
                                                                 ADA19900 standard;
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Query Match
Best Local Similarity
RESULT 241
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DE Human secreted polyp
PN US2003068709-A1.
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US2003054987-A1.
20-MAR-2003.
      ABM06446 standard; protein; 720 AA. Human secreted polypeptide PR01344, US2003068709-A1.
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US2003032134-A1.
13-FEB-2003.
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Human secreted polypeptide !
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US2003049782-A1.
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US2003049740-Al.
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Human secreted/transmembrane
US2003040074-A1.
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Human secreted/transmembrane protein
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US2003054480-A1.
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US2003073169-A1.
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide I
US2003073185-A1.
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US2003067478-A1.
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US2003096353-A1.
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Human secreted polypeptide |
US2003068735-A1.
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Human secreted/transmembrane
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Human secreted polypeptide |
US2003068753-A1.
         NBO37706 standard;
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Human secreted/transmembrane US2003068767-A1.
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ABM03952 standard; protein; 720 AA.
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ABO51777 standard; protein;
Human PRO polypeptide #85.
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US2003049750-A1.
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US2003104540-A1.
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US2003064449-A1.
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US2003054462-A1.
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Human PRO polypeptide #85. US2003049762-A1.
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Human secreted polypeptide
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Human secreted polypeptide I
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US2003054467-A1.
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Human secreted/transmembrane protein (PRO)
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Human secreted polypeptide PRO1344,
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Human secreted/transmembrane protein (PRO)
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide PRO1344,
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Human secreted polypeptide I
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Human secreted polypeptide
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       ABO45921 standard;
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Human secreted polypeptide PRO1344,
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ABM26945 standard; protein; 720 AA.
Human secreted polypeptide PRO1344, SEQ ID NO:170.
US2003068739-A1.
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US2003044927-A1.
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                                                            ABO29419 standard; protein; Human secreted/transmembrane US2003068697-A1.
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ABO31249 standard; protein; 'Human secreted/transmembrane
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US2003049746-A1.
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                                                       ABM75191 standard; protein; 720 AA.
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US2003104544-A1.
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Human secreted polypeptide PRO1344,
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Human secreted/transmembrane
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Human secreted poly
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(GETH) GENENTECH INC.
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US2003027754-A1.
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Human PRO1344 protein.
US2003065161-A1.
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Novel human secreted and tra
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US2003060600-A1.
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US2003049681-A1.
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US2003181646-A1.
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US2003181636-A1.
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Novel human secreted and tra
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25-SEP-2003.
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Human PRO polypeptide #19.
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US2003181699-A1.
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US2003181653-Al.
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25-SEP-2003.
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13-NOV-2003.
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US2003180852-A1.
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13-NOV-2003.
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Human PRO1344 polypeptide.
US2003228655-A1.
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Human PRO1344 polypeptide.
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Human PRO polypeptide #85.
US2003215910-A1.
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Human PRO polypeptide #19.
US2003181645-A1.
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Novel human secreted and transmembrane
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ADG69199 standard; protein; 720 AA. Novel human secreted and transmembr US2003180847-A1.
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US2003180916-A1.
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               ADH24750 standard; protein; 720 AA.
Novel human secreted and transmembrane
US2003180908-A1.
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protein sequence

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Best Loca
RESULT 666
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RESULT 668
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                                                                                           07-FEB-2001.
(HELI-) HELIX RES INST.
61.9%;
ATY Match 61.9%;
100.0%;
                                                                                                                                                                                               Human serine protease-like p
WO200109349-A1.
                                                            ADJ69990 standard; protein; 737 AA. Human heat mitochondrial protein as WO2003087768-A2.
                                                                                                                                 AAB93670 standard; protein; 737 AA. Human protein sequence SEQ ID NO:13202 EP1074617-A2.
                                                                                                                                                                                                                                                                           AAM41706 standard;
Human polypeptide (
WO200153312-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU00401 standard; protein;
Human secreted protein, POL
WO200119856-A2.
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                                                                                                                                                                                                                                                          (HYSE-) HYSEQ INC.
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) BOLDOG F L.
) SMITHSON G.
) RASTELLI L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; protein;
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SEQ ID NO
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71.9%; Score
99.7%; Pred.
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SEQ ID
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Best Loca
RESULT 675
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Best Local Similarity
RESULT 673
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                                     Clone HFPEY75. WO200061774-A2.
                                                                                                                  AAM39957 standard;
Human polypeptide
WO200153312-A1.
                                                                                                                                                                                               AAM39920 standard;
Human polypeptide &
WO200153312-A1
                                                                                                                                                                                                                                                                                                                                                                 AUL06662 standard; protein; 417 AA.
Human 3T3 cell conversion promoter FP938.
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Human serine protease-like p
WO200109349-Al.
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WO2004028479-A2.
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19-MAR-2003.
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                                                         AAB49533 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004031386-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADS85022 standard; protein; 737 AA.
Human atopic dermatitis-related protein sequence
                  (HUMA-) HUMAN GENOME
                                                                                               (HYSE-) HYSEQ INC.
                                                                                                                                                                             (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                 31-JAN-2002
                                                                                                                                                                                                                                                                                                                              (SHAN-) SHANGHAI XINSHIJIE GENE TECHN DEV CO
                                                                                                                                                                                                                                                                                                                   ocal Similarity
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                                                                                                                                                                                                                                                                                      rd; protein; 649 AA.
PRTS-17 protein.
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SEQ ID NO
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SEQ ID NO
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3065.
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3102.
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Pred. No.
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Score 355;
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ocal Similarity

100.0%;

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RESULT
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Best Local :
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                                           AAM41743 standard;
Human polypeptide;
WO200153312-A1.
                                                                                                                                      AAM24485 standard; protein;
Human EST encoded protein SI
WO200154477-A2.
                                                                                                                                                                                                                                                                                                                                     ABG64653 standard; protein; 323 AA. Human albumin fusion protein #1328. WO200177137-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human gene 5 encoded secreted protein HSLGU75, WO200218435-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR41485 standard; protein; 551 AA.
Human CD-like molecule HSXDF41, SEQ ID NO:284.
                                                                                                                                                                                                                                                      ADL77920 standard; protein; 323 AA.
Albumin fusion protein related therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL77919 standard; protein; 459
Albumin fusion protein related
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'HUMA-) HUMAN GENOME SCI INC.

'Y Match 38.3%; Score 276;

Local Similarity 100.0%; Pred. No.
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                                                                                                              HYSE-) HYSEQ INC.
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HASE/) HASELTINE W
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HASE/) HASELTINE W
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Local Similarity
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SEQ ID NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 323 AA.
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100.0%;
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100.0%;
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100.0%;
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15.8%;
100.0%;
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n #1327.
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EQ ID NO:
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 Score 114;
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therapeutic
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                                             AAR93590 standard; peptide; 30 AA. UK t-PA hybrid peptide CS20 residues WO9509908-A1.
                                                                                                                             AAR76945 standard; peptide; 30 AA.
UK-t-PA hybrid CS13 (residues 276-306).
WO9509908-Al.
                                                                                                                                                                                                                                                                                               AAY72114 standard; peptide; 12; Human serine protease epidermal WO200068247-A2.
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1.7%;
                                                                                                                                                                                                                                                                                                                                                                               AAB49539 standard; peptide; 12 AA. Clone HPPEY75 peptide fragment. WO200061774-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY11763 standard; protein; 34 AA.
Human 5' EST secreted protein SEQ
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Human 5' EST secreted protein SEQ 1
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UK t-PA hybrid peptide CS14 residues
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WO200109349-A1.
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1.2%; Score 9
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1.2%; Score 9
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                          SUMITOMO PHARM CO LTD.
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5.2e-50;
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Best
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RESULT 702
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                                                                       C-proteinase encoded
                                                                                                                                             AAP80618 standard; protein; 730 AA.
Human Bone Morphogenic Protein-1 of lambda U2OS-1.
                                                                                                                                                                                                            ABM80969 standard; protein; Tumour-associated antigenic WO2004030615-A2.
                                                                                                                                                                                                                                                                                   Human diagnostic WO2004023973-A2.
                                                                                                                                                                                                                                                                                            ABM84572 standard; protein; 622 AA.
Human diagnostic and therapeutic pp
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(TULA) TULANE EDUCATIONAL FUND.
(INRM) INST NAT SANTE & RECH MEDICALE.
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WO9937757-A1.
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UK t-PA hybrid peptide CS18
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UK t-PA hybrid peptide CS11
WO9509908-A1.
ADP65217 standard; protei
Human bone morphogenetic
                                                                                 AAW13669 standard;
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                                                                                                                                                                                                                                                                  (INCY-) INCYTE CORP.
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                                              (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                                                           (GETH ) GENENTECH INC.
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) HUBERT R S.
) LEONG K.
) RAITANO A B.
) SAFFRAN D C.
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1.2%; Score 9
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e of human Bmp-1
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          protein; 730 AA.
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protein 1, isoform
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residues
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residues 276-306
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RESULT 713
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                                                              ADH41547 standard; pr
Novel human protein N
WO2003102159-A2.
11-DEC-2003.
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04-SEP-2003.
(CHIL-) CHILDREN
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Novel human protein
WO2003102159-A2.
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                                                                                                                                                                                                                        ADH41543 standard; protein; Novel human protein NOV8f. WO2003102159-A2.
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Novel human protein NOV8i.
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ADM87216 standard;
Human protein SEQ :
WO2004009834-A2.
                                                                                                                                                                                                      (CURA-) CURAGEN CORP.
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l antigenic
       protein; 823
ID NO:309.
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n NOVBh.
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100.0%; Pred.
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target (TAT) polypeptide
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Best
RESULT
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Human tolloid-like
WO200264791-A2.
ABG79187 standard;
Human tolloid-like
WO200264791-A2.
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(NUVE-) NUVELO INC.
                                                                          ADQ18558 standard;
Human soft tissue s
                                                                                                                                             Human bone morphogenic US2003224501-A1.
                                                                                                                  04-DEC-2003.
(YOUN/) YOUNG P E.
(RUBE/) RUBEN S M.
                                                                                                                                                               ADH11578 standard;
                                                                                                                                                                                                                 VO200283874-A2.
                                                                                                                                                                                                                                   ABU54462 standard;
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09-FEB-1997.

(UVJE-) UNIV JEFFERSON THOMAS.

1.2%; Score !
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(CURA-) CURAGEN CORP.
                                          PROT-) PROTEIN DESIGN LABS
1.2%;
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Endothelial Marker
                                                                          protein; 986 AA.
sarcoma-upregulated
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2-like protein
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        protein; 992 AA.
2-like protein #
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                                                                     AAE36802 standard; protein; 50 Human epigen EGF-like domain. WO2003014159-A1.
                                                                                                                                                                ADM41606 standard; peptide; 11 AA.
Interleukin-1 receptor type 1 antibody light
                                                                                                                                                                                                                                                 ADH17899 standard;
Human 15H12/19D12 C
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(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
1.1%; Score 8; DB
1.1%; Pred. No. 6.
                                                                                                                                                                                                                                                                                                                                  ABB77068 standard; peptide; ACZ885 antibody light chain WO200216436-A2.
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(WISC ) WISCONSIN ALUMNI RES
1.2%;
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Human tolloid-like
WO9951730-A2.
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(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                             04-DEC-2003
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                             (CSIR ) COMMONWEALTH SCI & IND RES ORG.
(BIOM-) BIOMOLECULAR RES INST LTD.
(HALL-) HALL INST MEDICAL RES WALTER & ELIZA
                                                                                                                                                      WO2004022718-A2.
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WO200069884-A2.
                                                                                                      ADF10204 standard; protein;
Antibody light chain variabl
W02003074679-A2.
12-SEP-2003.
(XENC-) XENCOR.
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Skin cell protein,
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                                                   VEGF antibody light WO2003074679-A2.
                                                                                                                                                                                               Human germline light US2003039649-A1.
                                                                                                                                                                                                                                                                   ABO27159 standard; protein; 95 AA. Human germline light chain variable US2003039649-A1.
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                                                                                                                                                                                                                                                                                                                                                           AAY79331 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABB72226 standard;
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ADF10102
                                                                      ADF10103 standard;
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protein; 95 AA.
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Human antibody A26
WO2004033658-A2.
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Antibody light chain
WO2003074679-A2.
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Vkappa gene locus a
WO2003048321-A2.
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Antibody light chain variable region VLk_6D-21
                                                             Human A10/A26 antibody light EP1262193-A1.
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Human antibody Al0
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ry Match 1.1%;
t Local Similarity 100.0%;
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Vkappa gene locus a
WO2003048321-A2.
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ADO07305 standard;
Human proteolytic !
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                                            (PFIZ ) PFIZER PROD
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VO2004033658-A2

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Human proteolytic
WO2004033658-A2.
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Anti-TRAIL-R antibody relate
                                                                                                                                                                       Anti-interleukin-1
WO2004022718-A2.
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Human musculoskeletal system-associated protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human musculoskeletal system WO200155367-A1.
                                                                                                                                                                                        ADM41553 standard;
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                                                  AAY56718 standard; protein; 128 AA
                                                                                                    70200294880-A1.
                                                                                                                                                                                                                        (NOVS ) NOVARTIS AG.
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(RUBE/) RUBEN S M.
(BARA/) BARASH S C.
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Murine TGF-alpha homologue muTR1,
W09955865-A1.
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Human 15H12/19D12 light chain
WO2003100008-A2.
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Human 15H12/19D12 light chain B
WO2003100008-A2.
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Human modified 15H12/19D12 light ch
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Human 15H12/19D12 light chain A
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Human modified 15H12/19D12
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Human modified 15H12/19D12 light
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Human modified 15H12/19D12 light chain F
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SEQ ID NO: 187.
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protein; 152

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US2003233675-A1.
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(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                                                                                                    ADM41575 standard; protein; Anti-interleukin-1 receptor WO2004022718-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY93714 standard; protein; 155 AA.
The kappa chain of immunoglobulin clone
WQ200037504-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murine protein isolated from skin cells WO200190357-A1.
                  Protein encoded WO200277183-A2.
                           ABU22131 standard;
Protein encoded by
                                                                                    WO200017357-A1.
30-MAR-2000.
                                                                                                       AAY79332 standard; protein; 467 AA.
Human EGF repeat-containing protein EGF-Hyl.
                                                                                                                                                                                                                                                                                          Human adipocyte
WO200286122-A2.
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Human adipocyte Sel
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Human anti-MCP-1 variable region light chain
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                                                                           (HYSE-) HYSEQ INC.
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ELITRA PHARM INC
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. 1.3e+02;
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. 1e+02;
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. 1e+02;
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. 71;
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                                                         3; Length
.9e+02;
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                                                                   467;
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Query Match
Best Local Similarity
RESULT 779
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RESULT 785
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RESULT 780
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RESULT 782
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US2003166855-A1.
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US2003166855-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-SEP-2003.
                              ABP72332 standard; protein; Horseshoe crab Factor C. WO2003002976-A2.
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(UYSI-) UNIV SINGAPORE NAT.
1.1%;
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WO200270539-A2.
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ry Match 1.1%; Score
t Local Similarity 100.0%; Pred.
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                                                                                                        WO200127289-A2.
19-APR-2001.
                                                                                                                             AAB60935 standard; protein; 1019 AA.
Horseshoe crab recombinant Factor C
                                                                                                                                                                                           16-NOV-1999
                                                                                                                                                                                                               AAY42490 standard; protein; 1019 AA.
Recombinant N-terminally truncated Horseshoe crab
                                                                                                                                                                                                                                                         12-JAN-1999.
(UYSI-) UNIV SINGAPORE NAT.
1.1%;
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1.1%;
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                       09-JAN-2003
                                                                                              (UYSI-) UNIV SINGAPORE NAT.
                                                                                                                                                                                 (UYSI-) UNIV SINGAPORE NAT.
                                                                                                                                                                                                      US5985590-A.
                                                                                                                                                                                                                                                                                                                                                                 01-APR-1999.
                                                                                                                                                                                                                                                                                                                                                                                               AAY05750 standard; protein; 1019
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             (WHIK)
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BIOWHITTAKER INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sEQ ID NO
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100.0%;
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b. 4e+02;
                                                                         DB 4;
. 4e+02;
                                                                                                                                                            DB 3; 1
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. 4e+02
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  DB
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.2e+02;
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.4e+02;
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RESULT 796
ID AAB947
DE Human
PN EP1074
PD 07-FEB
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ID AF
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Horseshoe crab Factor C.
W09915676-A1.
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                                               Human protein sequence EP1074617-A2.
                                                                     AAB94754 etandard;
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Horseshoe crab recombinant Factor C #1
WO200127289-A2.
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Singapore horseshoe crab factor C pr
                                                                                                                                     #0200171042-A2.
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                                                                                                                                                                                                                                    ABP72333 standard; protein; 1083 AA. Horseshoe crab Factor C.
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US5985590-A.
                                                                                                                                                                                                                                                                                                                                                                                                                            AAY42489 standard;
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Horseshoe crab Factor C protein #1.
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ry Match 1.1%;
Local Similarity 100.0%;
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(UYSI-) UNIV SINGAPORE NAT.
1.1%;
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                                                           ; 1316 AA.
ID NO:15811
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     Score 8; Pred.
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.2e+02;
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Best Loca
RESULT 798
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RESULT 799
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         Query Match
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                                                  Human C3b/C4b
                                                                                                                        Human CGDD-33 protein.
WO2003050253-A2.
                                                                                                                                                                                                          ADN39979 standard; protein; 3557 AA. Cancer/angiogenesis/fibrosis-related WO2003042661-A2.
                                                                                                                                                                                                                                                                                            ADN39112 standard; protein; 3557 AA. Cancer/angiogenesis/fibrosis-related WO2003042661-A2.
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ADS10672 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADF28692 standard; protein; 1487 AA. Human peroxidasin-like protein - SED WO2003048326-A2.
                                                   AAE20146 standard; protein; 3571 AA.
Human C3b/C4b complement receptor-like
                                                                                                                                                                                                                                                                                                                                                                               Human therapeutic WO2004080148-A2.
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                                                                                                                                              AAE37944 standard; protein; 3570
                                                                                                                                                                                                                                                                                                                                                                     23-SEP-2004
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23-SEP-2004.
                                                                                                                                                                                                                                                                          (EOSB-)
                                                                                                                                                                                                                                                                                                                                                          (NUVE-) NUVELO INC
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SEQ ID 9
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d protein
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SEQ ID 909.
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. 1.2e+03;
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.2e+03;
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.8e+02;
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.7e+02;
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Human EST encoded p
WO200154477-A2.
                AAM06451 standard; protein;
Human foetal protein, SEQ T
WO200155339-A2.
                                                                                    ADC33279 standard; protein; Human novel contig-encoded pw02003029271-A2.
                                                                                                                                                                                                                              N. gonorrhoeae amino
WO200279243-A2.
                                                                                                                                                                                                                                                                                                         Modified urinary plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                  ADO77622 standard; peptide; 15 AA.
Human 213P1F11 HLA motif bearing epitope #11721
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Human 213P1F11 HLA motif bearing e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADL22512 standard; protein; 3571
Human CNGH0004 antibody protein.
                                                                                                                                                                                                                                                ABP78761 standard;
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                                                                   HYSE-) HYSEQ INC.
                                                                                                                                         HYSE-) HYSEQ INC.
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HUBERT R S.
MORRISON R K.
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MORRISON R K.
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l protein SE
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.5e+02;
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09-AUG-2001

(MOLE-) MOLECULAR DYNAMICS INC.
1.0%; Score 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus aureus protein #666 W0200294868-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Clone selected after panning a WO9920749-A1.
                                                                                                                                                                                                                                                   Peptide #9569 encoded by human WO200157277-A2.
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C glutamicum protein fragment S
                          ABG57494 standard; peptide;
Human liver peptide, SEQ ID
WO200157273-A2.
                                                                                                      Human brain exp
WO200157275-A2.
                                                                                                                                            (MOLE-) MOLECULAR DYNAMICS INC. ry Match 1.0%; Score tocal Similarity 100.0%; Pred.
                                                                                                                                                                        09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                        ABM44812 standard;
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                                                                                                             AAM62944 standard; protein; 63 AA.
Human brain expressed single exon
                                                                                                                                                                                         AAM/15756 standard; protein; 63 AA.
Human bone marrow expressed probe encoded protein SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAU48293 standard;
                                                                                  (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                WO200157276-A2.
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DYNAMICS INC.
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. 3e+02;
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. 2.7e+02;
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                                                                                                      Albumin fusion protein; 79 AA. US2004010134-AI.
                                                                                                                                                                           Human albumin fusion protein #1326. W0200177137-A1.
                                                                                                                                                                                                                                                    Human gene 5 encoded secreted W0200218435-A1.
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Propionibacterium &
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(HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Propionibacterium acnes
                                             ABM64695 standard,
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                                                                               ROSE/) ROSEN C A.
HASE/) HASELTINE
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TV Match 1.0%;
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WO9855130-A1.
                                                                         Pseudomonas aeruginosa polypeptide #6772.
US6551795-B1.
                                                                                                                                            AAW99113 standard; protein; 111 AA. Bovine zeta 2 prethrombin 2. W09855130-A1. 10-DEC-1998.
                                                                                                                                                                                                                        ADG32136 standard; protein; 108 Mutant B licheniformis secreted WO2003093453-A2.
                                                                                                                                                                                                                                                                                                              AAU27656 standard; protein;
Human protein AFP548753.
WO200166748-A2.
                                                                                                                                                                                                                                                                                                                                                                                          ABP06753 standard;
Human ORFX protein
WO200192523-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY64590 standard; peptide; 105 AA. Nonclassical cadherin extracellular W09957149-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF05104 standard; protein;
Bacterial polypeptide #1217.
                   AAW99115 standard;
                                                                                             ABO74597 standard; protein; 111 AA
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Human secreted protein, SEQ
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Best Local Similarity

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EP1033405-A2.
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                                   AAB50629 standard; protein; 144 AA.
Flea serine protease PfSP32-144 protein sequence
                                                                              30-OCT-1997.
(HESK-) HESKA CORP.
                                                                                                   WO9740058-A1.
                                                                                                         Flea serine protease
                                                                                                                     AAW41967 standard;
                                                                                                                                                                                  Klebsiella pneumoniae
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EP1033405-A2.
                                                                                                                                                                                                                                                         AAG26790 standard;
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EP1033405-A2.
                                                                                                                                                                                                                                                                                                                       AAG51372 standard;
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US6551795-B1.
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EP1033405-A2.
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          HESKA CORP.
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fragment SEQ ID NO:
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iae polypeptide s
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n fragment
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Arabidopsis thaliana protein
EP1033405-A2.
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                                                                                                                                                        Protein encoded WO200277183-A2.
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                        E. faecium protein
US6583275-B1.
                                                                            06-SEP-2000.
                                                                                   Arabidopsis thaliana EP1033405-A2.
                                                                                                    AAG51370 standard; protein;
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                                                                                                                                                                                                                                  AAY34950 standard; protein; 172 AA.
Amino acid sequence of a Chlamydia pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                    ADI45291 standard; protein; 164 AA. Rice isoprenoid biosynthesis-associated
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WO2003033515-A1
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                                          ADC97109 standard;
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Prokaryotic essential
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                                                                                            ; 184 AA.
In fragment
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n fragment
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CORP.
Score
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                                            ABU27599 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                            AAY35451 standard; protein; 210 AA. Chlamydia pneumoniae transmembrane W09927105-A2.
                                                                                                                                                                                                                                                                                                                                      18-AUG-2004.
(REAS-) RES ASSOC BIOTECHNOLOGY.
1.0%; Score
1.0%; Pred.
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18-DEC-2003
Protein encoded W0200277183-A2. 03-OCT-2002.
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Protein encoded by
WO200277183-A2.
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Bacterial polypeptide #428.
US6605709-B1.
                                            ABU41513 standard;
Protein encoded by
                                                                                                 AAG15809 standard; protein; 228 AA. Arabidopsis thaliana protein fragment EP1033405-A2.
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EP1033405-A2.
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AAG33373 standard; protein; 230 AA.
AAG33373 standard; protein; 230 AA.
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Pseudomonas aeruginosa cellular proliferation
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Protein encoded by
Zea mays protein fragment SEQ ID NO: 40424.
EP1033405-A2.
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                                                                                                                                                                                                        Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                                                                                                                                               06-SEP-2000.
                                                                                                                                                                                                                                                                      Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                       Protein encoded
WO200277183-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                               ABU15506 standard; protein; 232 Protein encoded by Prokaryotic
                   AAG33371 standard;
                                                                                            ABU49459 standard;
                                                                                                                                 06-SEP-2000.
                                                                                                                                                           AAG33372 standard;
                                                                                                                                                                                                                          AAG15808 standard;
                                                                                                                                                                                                                                                                                          AAG51368 standard; protein;
                                                                                                                                                                                                                                                                                                                             (HESK-) HESKA CORP.
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(ELIT-) ELITRA PHARM INC.
1.0%;
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                   protein; 241 AA.
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Prokaryotic
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n fragment
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                                                                                                      Human thrombin Asn99 mutant.
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Salmonella typhi cellular proliferation
                                                                                                                                                                                                                                                                                                                                                                                                      ADL05143 standard; protein; M. catarrhalis protein #909.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADK17097 standard; protein; 254 AA. Nanoarchaeum equitans cancer-associated WO2003093434-A2.
                                             ABP60565 standard;
                                                                                                    NO9641868-A2.
                                                                                                                                                         06-SEP-2000.
                                                                                                                                                                   Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                                                                    AAG15807 standard; protein;
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Human 18TH H protein - SEQ ID 11.
                           WO2002100337-A2.
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1.0%;
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                                   protein; 259 AA.
lant W215A/E217A
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protein fragment
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b. 1.1e+03;
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b. 1.1e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW72891 standard; protein; Mycobacterium tuberculosis a
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B tropicalis allergen
WO200230968-A1.
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Amino acid sequence of antigen CFP29
WO9924577-A1.
                              Human soft tissu
WO2004048938-A2.
                                                                                                                       WO2003087768-A2.
                                                                                                                                 Human heat mitochondrial protein
                                                                                                                                                                                                      Flea serine pous 6204010-B1.
                                                                                                                                                                                                                AAB62510 standard; protein; 268 AA.
Flea serine protease PfSP32_268.
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WO9740058-A1.
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Flea serine protease SEQ ID
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                                                  ADQ21743 standard;
                                                                                                                                           ADJ69394 standard; protein; 271 AA.
                                                                                                                                                                                                                                                                                                            AAO17668 standard; protein;
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(UYSI-) UNIV SINGAPORE NAT.
1.0%;
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ry Match 1.0%;
t Local Similarity 100.0%;
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(BUCK-) BUCK INST AGE
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DESIGN LABS INC.
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                                        protein; 271 AA.
sarcoma-upregulated
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gen Blot 3
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Tick derived serine |
JP2000083677-A.
28-MAR-2000.
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Propionibacterium a
                                           AAR74779 standard; protein;
Mutant thrombin E229S.
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                                                                                                                                                                                                                                             Mutant thrombin K52A, WO9513385-A2.
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Propionibacterium a
WO2003033515-A1.
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                                      WO9513385-A2.
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(GILE-) GILEAD SCI.
                                                                                                                                                                                                                                                                                                                                                                                                    AAR74778 standard;
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                                                                                                                        AAR76039 standard;
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                                                                                                                                                                                                                                                              AAR74776 standard;
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(GILE-) GILEAD SCI.
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W09513385-A2.
18-MAY-107
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Mutant thrombin W50K.
WO9513385-A2.
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Mutant thrombin R233F.
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acid sequence

standard; protein; 295 AA.

human thrombin.

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Bovine prethrombin
WO9855130-A1.
AAB87820 standard; protein; 308 AA
                                                         AAW99109 standard;
Human prethrombin :
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WO200230968-A1.
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B tropicalis allergen Blot 3 polymorphic variant
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B tropicalis allergen Blot 3 polymorphic variant protein
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                                          ABR62454 standard;
Bovine recombinant
WO2003052059-A2.
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                                                                                                                       Mouse tryptase-like US6514741-B1.
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27-AUG-2003
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WO200118050-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                               DB 6; Length . 1.3e+03;
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. 1.3e+03;
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                                                      Escherichia
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RESULT 957
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(CAOY/) CAO Y.
(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                Rat T2R13 amino acid sequenc WO200118050-A2.
                                                                                                                                                                                                                                                                                    Bacterial polypeptide #16209
US2003233675-A1.
                                                                                                                                                                         ADS26796 standard; protein; 330 Bacterial polypeptide #15829. US2003233675-Al.
                                                                                                                                                                                                                                                                                                                                                                      ABP41695 standard; protein; 324 AA. Human ovarian antigen HNTTB23, SEQ WO200200677-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse serine protease ztrypl.
US2003119035-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABR62450 standard;
Bovine recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003052059-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABR62453 standard;
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WO2003052059-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC17377 standard; protein; 314 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003052059-A2.
                           (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ELIL) LILLY & CO ELI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ELIL ) LILLY & CO
                                                                                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                                 ZYMO ) ZYMOGENETICS INC.
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Local Similarity
958
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) HINKLE G J.
) SLATER S C.
) CHEN X.
                                                                                                                 GOLDMAN B S.
                                                                                                                                                                                                                                    GOLDMAN B S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 314 AA.
prethrombin-2, expressed in Escherichia coli.
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                                                                rotein; 332 AA.
sequence SEQ I
          100.0%;
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        DB 4; Length 332; . 1.4e+03;
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1.3e+03;
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Best Loca
RESULT 961
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RESULT 964
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                                                                                                                                                                                                                                                                                                                 (LAUR/) LAURIE C C.
(RAVA/) RAVANELLO M.
(SAVA/) SAVAGE T.
(LEDE/) LEDEAUX J R.
(ROGE/) ROGERS J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (LAUR/) LAURIE C C.
(RAVA/) RAVANELLO M.
(SAVA/) SAVAGE T.
(LEDE/) LEDEAUX J R.
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18-DEC-2003
Neisseria meningitidis strain A
WO9924578-A2.
20-MAY-1900
                                                                                                                                                                       ADR09339 standard; protein; 357 AA. Human protein useful for treating n EP1447413-A2.
                                                                                                                                                                                                                                                                                                                                                                                       ADJ49561 standard; protein;
Oil-associated gene related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oil-associated gene US2004025202-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADR29162 standard; protein; 332 AA. Taste receptor modulation-related r W02004069191-A2.
                                                                                                                                                                                                                                              WO2003029271-A2.
                                                                                                                                                                                                                                                               Human novel polypeptide sequence, SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADJ49544 standard; protein;
                                                                                26-JUN-2003
                                                                                         Bovine recombinant
WO2003052059-A2.
                                                                                                            ABR62452 standard;
                                                                                                                                                                                                                                  (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                           ADC31358 standard; protein; 357 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                          (ROGE/) ROGERS J A.
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                                                                                                                                                    (REAS-) RES ASSOC BIOTECHNOLOGY.
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1.0%;
                                                                                                 protein; 362 AA. prethrombin-2, e
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| protein
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b. 1.4e+03;
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Query Match
Best Local Si
RESULT 973
ID AAX42789 s
DE Human CD4/
PN US5961973-
PD 05-OCT-199
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                                                                                                                                                    CD4/Thrombin fusion WO9318162-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY38817 standard; protein; 375 AA. Neisseria gonorrhoeae antigenic protein WO9924578-A2.
AAU10703 standard;
Human CD4-thrombin
US6287561-B1.
                                                                         Human CD4/thrombin
US5961973-A.
                                                                                                                                                                                                                                        AAU72957 standard; protein; 375 AA.
Neisseria meningitidis virulence protein
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Neisseria meningitidis ORF '
WO9957280-A2.
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Neisseria meningitidis ORF 706 protein
WO9957280-A2.
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                                                                                              AAY42789 standard;
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Neisseria gonorrheae ORF 706
                                                                                                                                                                                                   (MICR-) MICROSCIENCE LTD.
                                                                                                                                                                                                                                                                                         (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                             (GENO-) INST GENOMIC
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                                                                                                                                  CREA-) CREAGEN INC
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                                                                                  protein; 376 AA. fusion protein.
       protein; 376 AA. fusion protein.
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706 p
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)6 protein
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.5e+03;
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Best Local Similarity RESULT 983
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                                                                                                                                                Fruitfly odourant receptor F W02003020913-A2.
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22-APR-2003.
(GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAG21667 standard; protein; Arabidopsis thaliana proteir EP1033405-A2.
AAB03444 standard; protein; 426 AA. Candida albicans essential growth p
                                                                                                                                                                                                                                           ABU37254 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                                                                                                                                             ABP79601 standard; protein; 409 ÅA. N. gonorrhoeae amino acid sequence WO200279243-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                          ABP80460 standard; protein; 409 AA N. gonorrhoeae amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY38816 standard; protein; 409 AA.
Neisseria gonorrhoeae antigen encoded by partial ORF146.
W09924578-A2.
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(CREA/) CREA
                                                                                  Klebsiella
                                                                                                                                                                                                                                                                                                         (CHIR-) CHIRON SPA.
                                                                                             ABO65926 standard; protein; 422 AA.
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ELITRA PHARM INC.
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JANSSEN PHARM NV

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RESULT 985
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   (ELIT-) ELITRA PHARM INC.

(ELIT-) ELITRA PHARM INC.

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t Local Similarity 100.0%;
                                                   ABU33733 standard;
Protein encoded by
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Prokaryotic esse
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Arabidopsis thaliana
EP1033405-A2.
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(RAVA/) RAVANELLO M.
(SAVA/) SAVAGE T.
(LEDE/) LEDEAUX J R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADP23764 standard; protein; 463 AA. PRO polypeptide SEQ ID NO:942. W02004041170-A2.
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                                                                                                                                                                                                                                                        ADN21085 standard; protein;
Bacterial polypeptide #3738,
US2003233675-Al.
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Protein encoded by Prokaryotic essential gene
                                                             Staphylococcus aureus WO200294868-A2.
                                                                                 ABM72219 standard;
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ry Match 1.0%;
t Local Similarity 100.0%;
                                          (CHIR-) CHIRON SPA.
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(SLAT/) SLATER S
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B. burgdorferi antigenic protein, f
WO9859771-Al.
                                                                                                                      Streptococcus p
WO200234771-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABO84661 standard; protein; 494 Mouse cancer-associated protein WO2004074320-A2.
                                                 ABO23531 standard; protein; 497 AA
                                                                                         (CHIR-) CHIRON SPA. (GENO-) INST GENOMIC
                                                                                                                                                                                                                                                                                                           1SV-2 strain SB5
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                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC.
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INSP ) INST PASTEUR.
(CNRS ) CNRS CENT NAT RECH SCI.
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MEDI-) MEDIMMUNE INC.
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BRAHMACHARI S K.
RAMACHANDRAN S.
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Contig ID 16 ORF#8
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3Q ID NO 3750
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Best Local Similarity RESULT 1015
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RESULT 101
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24-OCT 2002.
(AMCY ) AMERICAN CYANAMID CO.
1.0%; Score 7
ABU88436 standard;
E. faecalis novel |
                                                                                                                                    WO9850554-A2.
                                                                                                                                                     AAY00189 standard;
                                                                                                                                                                                                           Streptococcus pneumoniae polypeptide WO200283855-A2.
                                                                                                                                                                                                                                                                                                  S. pneumoniae type
                                                                                                                                                                                                                                                                                                                                                                                        US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human novel secreted protein; WO2001553222
                                                              US2002045737-A1.
                                                                                ABP43408 standard;
                                                                                                                                                                                                                             ABP81378 standard; protein;
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S. pneumoniae type 4 strain
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Human novel polypeptide #325.
                                                                                                                   (HUMA-) HUMAN GENOME
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(GENO-) INST GENOMIC RES.
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(BHIM/) BHIMARAO
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                                                                  มห43408 standard; protein; 503 AA.
faecalis EF094 antigenic fragment
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(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
Pseudomonas aeruginosa polypeptide US6551795-B1.
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Amino acid sequence
FR2798138-A1
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                                                                                     AAE34033 standard; protein; 5
Murine notch ligand jagged 2
                                                                                                                                                      Mouse notch ligand WO200277204-A2.
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Staphylococcus aureus von Willebrand
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Bacterial polypeptide #11240.
US2003233675-A1.
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39-MAR-2001.

(CNRS) CNRS CENT NAT RECH SCI.

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                                                          (AXOR-) AXORDIA LTD
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S. pneumoniae type 4
W0200277021-A2.
03-OCT-2002.
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W0200170955-A2.
27-SEP-2001.
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(GENO-) GEN
                                       Streptococcus pneumoniae protein, US6699703-B1.
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                                                 T 1034
ADK48791 standard; protein; 553 AA.
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Protein encoded by
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(GENO-) INST GENOMIC RES.
1.0%;
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Streptococcus pneumoniae cellular p
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(ELIT-) ELITRA PHARM INC.
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ry Match 1.0%;
t Local Similarity 100.0%;
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(SLAT/) SLATER S
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Human phosphatidyl
WO200164895-A2.
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                                     AAR35763 standard; protein; Prothrombin (PT). WO9309804-A1.
                                                                                                                 ABU18645 standard; protein; 573 AA. Protein encoded by Prokaryotic essential
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WO200283876-A2.
                                                                                                                                                                                      ABP75529 standard; protein; 563 /
Human secretory polypeptide SPTM
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Novel S. pneumoniae protein
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(VIAL-) VIALACTIA BIOSCIENCE NZ LTD.
(YIAL-) 1.0%; Score 7;
ry Match 1.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                       ABP61060 standard; protein; 557 AA.
Lactobacillus rhamnosus HN001 polypeptide
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Human prothrombin I
WO9641868-A2.
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EP1033405-A2.
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                        Drosophila melanogaster
WO200171042-A2.
                                       ABB66001 standard;
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Bacterial polypeptide #17841.
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WO9855130-A1.
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W09641868-A2.
27-DFC-1007
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                                         WO2003014381-A1.
                                                 ADL18196 standard; protein; Human coagulation factor II
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Human Factor 2, F2, protein,
WO2003029493-A1.
                                                                                                                                                                                Human F2 protein.
WO2003016494-A2.
27-FEB-2003.
                                                                                                                                                                                                          ABG74671 standard;
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Amino acid sequence of the human
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                       (AHRA-) AHRAM BIOSYSTEMS INC.
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   Arabidopsis thaliana protein;
Ep1033405-A2.
06-SEP-2000.
                                                                                                  ABB58511 standard; prote Drosophila melanogaster WO200171042-A2.
                                                                                                                                                                                   ABB93056 standard; protein; 658 Herbicidally active polypeptide W0200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                        ADL27332 standard; peptide; 638 AA.
Amino acid sequence of prethrombin(G4S)3scFvalphaHA
W02004019878-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADQ30580 standard; protein; 622 AA. Pancreas cancer marker - prothrombin precursor WO2004055519-A2.
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                                                                                                                                                                                                                                                                     11-MAR-2004.
                                                                                                                                                                                                                                                                               Amino acid sequence WO2004019878-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bovine recombinant
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(SINO-) SINOGENOMAX
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                                                                                (PEKE )
                                                                                                                                                                                                                                                                                         ADL27333 standard; peptide; 638 AA.
Amino acid sequence of scHA(G4S)3prethrombin
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Drosophila melanogaster polypeptide SEQ W0200171042-A2.
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                                     ABB58512 standard; protein; 787 AA.
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Rice isoprenoid biosynthesis-associated protein #89.
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TY Match 1.0%;
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) BRIGGS S P.
) COOPER B.
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PROVART N.
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transporter TKHp protein
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o acid sequence
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Prokaryotic essential
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                                                                                                                                                            Plant lipid metabolism protein; 800 W02004013304-A2.
                                                                                                                                                                                                                                          A. thaliana protein 21878 #SEQ ID 42. W02003008440-A2.
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C glutamicum protein fragment
Epi108790-A2.
                                                  (AUCK-) AUCKLAND UNISERVICES LTD.
(AUCK-) AUCKLAND UNISERVICES LTD.
ry Match 1.0%; Score 7.0%; Pred.
                                                                                                                                                                                                                                                                                                                           Herbicidally active WO200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pseudomonas aeruginosa polyp
US6551795-51
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DE10154177-A1.
                                                                                        Aluminium resistance
WO9634959-A1.
                                                                                                            AAW07872 standard;
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             Novel protein (useful WO2003054152-A2.
                                                                                                                                                                                                                                                                                                                                               ABB92279 standard; protein;
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A. thaliana DGD1.
                                 ADE08613 standard;
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ry Match 1.0%;
Local Similarity 100.0%;
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                       protein; 892 AA.
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polypeptide #1251.
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Enterococcus faecalis protein EF102. W09850554-A2.
                                                                                                                                                                                                                                                                                    Recombinant protein production method W02004027067-A2.
                                                                          Enterococcus faecalis protein; WO9850554-10
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WO200259322-A2.
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Drosophila melanogaster
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US2003017495-A1.
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US2002045737-A1.
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(HUMA-) HUMAN GENOME SCI INC.
1.0%; Score 7
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E. faecalis novel protein #179.
US2003017495-A1.
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Enterococcus faecalis EF040 polypeptide #179
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AAY99613 standard; protein; 1140 AA.
                                                  WO2003050253-A2.
19-JUN-2003.
                                                                      Human CGDD-1 protein.
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Enterococcus faecalis polypeptide
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Streptococcus GB2345288-A.

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                                                                                                 ABG71664 standard; protein; 1346 AA. S. venezuelae narbonolide synthase s
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                 S. venezuelae narbonolide synthase subunit 4 (PICAIV)
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S. venezuelae pik (
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(EMBL-) EMBL.
                             ADA09403 standard; protein; 1346 AA.
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                                                 DB 4
                                                                                                                              DB 3; Length 1346; 4.8e+03;
                                                                                                                                                                                                             DB 3; Length
. 4.8e+03;
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.2e+03;
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.8e+03;
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Best Local
RESULT 1115
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RESULT 1117
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(LIUH/) LIU H.
(XUEY/) XUE Y.
(ZHAO/) ZHAO L.
                                                               ABP28343 standard; protein; Streptococcus polypeptide SI WO200234771-A2.
02-MAY-2002.
                                                                                                                                                                                                     Bacterial polypeptide US2003233675-A1.
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27-AUG-2003.
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EP1258494-A1.
20-NOV-2002.
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Streptomyces macrolide biosynthetic protein -
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ADG71666 standard; protein; 1666 AA
                                                                                                                                                                                                                                                                                          Yeast Okazaki f
KR2002072712-A.
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Disease treating protein complex-derived
                                                                                                                                                                                                                                                                                                                ADM35845 standard; protein; 1522
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                                       (GENO-) INST GENOMIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABR53267 standard;
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(BETL/) BETLACH M C.
(BETL/) BETLACH M.
                                                                                                                                                   CHEN/) CHEN X.
                                                                                                                                                         (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MCDA/) MCDANIEL R.
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EQ ID
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5. 4.8e+03;
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Query Match
Best Local Similarity
RESULT 1130
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RESULT 1124
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                                                                                                                Cancer/angiogenesis/fibrosis-related WC2003042661-A2.
                                                   Human soft
                                                                                                                                                                                                               ADJ68615 standard; protein; 2911 AA.
Human heat mitochondrial protein as a therapeutic target SeqID421.
WO2003087768-A2.
                                                                                                                                                                                                                                                                                             ABO07259 standard; protein; 2911 Human p53 modifying protein, SEQ WO200299122-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human cancer-associated WO2004058288-A1.
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JP2003265186-A.
                                         WO2004048938-A2.
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ADQ59382 standard; protein; 2
מושפה רפחכפר-associated (CA)
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                                                            ADQ18204 standard;
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(PEKE ) PE CORP NY.
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                                                                                                                                                                                    (BUCK-) BUCK INST AGE
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                                                                                                                                                                                                                                                                           EXEL-) EXELIXIS INC.
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          PROTEIN DESIGN LABS INC.
1.0%; Sco
                                                                                                    EOS BIOTECHNOLOGY INC.
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                                                 tissue sarcoma-upregulated
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                                                            protein; 2911 AA
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DB 8; Length 2911; 9.8e+03;
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RESULT 1136
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RESULT 1134
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                                                                                                                                                                                                      Drosophila melanogaster poly WO200171042-A2.
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WO200050605-A1.
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S. venezuelae pik gene cluster-encoded protein, SEQ ID NO:6. WO200000620-A2. 06-JAN-2000.
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30-AUG-2001.
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Streptomyces avermitilis protein
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                               AAY77180 standard;
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Streptomyces venezuelae pik gene cluster protein
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                                                                                                         (SHER/) SHERMAN D H.
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                              protein; 12199 AA
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Human 193P1E1B protein
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Human 193P1E1B protein WO2003050255-A2.
               ADD97659 standard; peptide;
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Human 193P1E1B protein
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Human 213P1F11 HLA
US2004019915-A1.
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Human 193P1E1B prot
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Best Local Similarity RESULT 1167
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  Query Match
Best Local Similarity
RESULT 1171
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Best Local Similarity
RESULT 1169
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Best Local Similarity 100.0%;
RESULT 1168
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                          Human 193P1E1B ep
US2004102407-A1.
27-MAY-2004.
(RAIT/) RAITANO !
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(CHAL/) CHALLITA-EID I
(FARI/) FARIS M.
(HUBE/) HUBERT R S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADP51254 standard; peptide; 9
Human 193PIE1B eptiope #1448.
US2004102407-Al.
27-MAY-2004.
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Human 193P1E1B eptiope #2227.
US2004102407-A1.
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                                                              ADP50967 standard; peptide; 9 AA.
                                                                                                                                                              US2004102407-A1.
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Human 193P1E1B eptiope #70.
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Human 193P1E1B eptiope #2681.
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(JAKO/) JAKOBOVITS
                                                                                                                          (RAIT/) RAITANO A B.
(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
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(GEWW/) GE W.
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) MORRISON R K.
| GE W.
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HUBERT R S.
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GE W.
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SULT 1172
ADP50125 standard; peptide; 9 AA.
Human 193P1E1B eptiope #319.
                                                                                                                                           ADP52313 standard; peptide; 9 AA.
Human 193P1E1B eptiope #2507.
US2004102407-A1.
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JS2004102407-A1.
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Human 193P1E1B eptiope #2631.
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J/) CHALLITA-EID P I

J/) FARIS M.
                                                                                  //) RAITANO A B.
//) CHALLITA-EID P M.
//) FARIS M.
E/) HUBERT R S.
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/) GE W.
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/) GE W.

    JAKOBOVITS A.

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) CHALLITA-EID P M.
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FARIS M.
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(CHAL/) CHALLITA-EID P
(FARI/) FARIS M.
(HUBE/) HUBERT R S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADP51903 standard; peptide; 9 AA.
Human 193P1E1B eptiope #2097.
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Human 193P1E1B eptiope #2009.
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Human 193P1E1B eptiope #2775.
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Human 193P1E1B eptiope #1524.
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(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
                                                                                        ADP52015 standard; peptide; 9 AA.
Human 193P1E1B eptiope #2209.
                                                                                                                                                                                                               JS2004102407-A1.
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                                       CHAL/) CHALLITA-EID FARI/) FARIS M.
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(CHAL/) CHALLITA-EID
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Best 1
               Human 193PIELB eptiope #47.
US2004102407-A1.
                                                                                                          ADP52253 standard; peptide; 9 AA.
Human 193P1E1B eptiope #2447.
US2004102407-A1.
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Human 193P1E1B eptiope #1752.
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Human 193P1E1B eptiope #869.
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HUBERT R S.
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GE W.
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RAITANO A B. CHALLITA-EID
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(HUBE/) HUBERT R S.
(GEWW/) GE W.
(JAKO/) JAKOBOVITS A.
                                                                                                                           ADE00146 standard; peptide; 10 Human 193P1E1B protein peptide WO2003050255-A2.
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Human 193P1B1B protein peptide
WO2003050255-A2.
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                                                                                                                                                                                                                                                                                                                                                                   Neuropeptide for controlling JP06100590-A.
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Human 193PIEIB eptiope #2098.
US2004102407-Al.
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Human 193P1E1B eptiope #653.
                                               ADD97235 standard; peptide; 10 Human 193P1E1B protein peptide WO2003050255-A2.
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27-MAY-2004.
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                                                                                                          (AGEN-) AGENSYS INC.
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                                                 Human 193P1E1B protein peptide fragment WC2003050255-A2.
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Human 193P1E1B protein pepti
WO2003050255-A2.
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Human 193PIE1B protein peptide fragment 1038.
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Human 193P1E1B protein peptide
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Human 193P1E1B protein pepti
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Human 19391E1B protein peptide fragment
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standard; peptide; 10 AA
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peptide fragment
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peptide fragment 1381.
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Human 193P1E1B protein peptide
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Human 19391515 protein peptide fragment 3136
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Human 193P1E1B protein peptide
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ADD97241 standard; peptide; 10 AA.
Human 193P1E1B protein peptide fragment
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(LIFQ/) LI F Q.
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Human 193P1E1B eptiope #3251.
US2004102407-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN14200 standard;
HIV B cell epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human 193P1E1B protein WO2003050255-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADD97809 standard; peptide;
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                                                                                                              ADP52943 standard; peptide; 10 AA.
Human 193P1E1B eptiope #3137.
US2004102407-A1.
                                                                                                                                                                                                                                                ADP53216 standard; peptide; 10 AA.
Human 193P1E1B eptiope #3410.
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ADP53074 standard; peptide; 10 AA.
Human 193P1E1B eptiope #3268.
                                                                                                                                                                                                   (RAIT/) RAITANO A B.
(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGEN-) AGENSYS INC.
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                                                                                             RAIT/) RAITANO A B
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) CHALLITA-EID
) FARIS M.
                                                          CHALLITA-EID
PARIS M.
HUBERT R S.
GE W.
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                                               JAKOBOVITS
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 Query Match
Best Local Similarity
RESULT 1226
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RESULT 1225
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Best Local Similarity
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Human 193P181B eptiope #3312.
US2004102407-A1.
27-MAY-2004.
                                                                                                                                      (CHAL/) CHALLITA-EID I
(FARI/) FARIS M.
(HUBE/) HUBERT R S.
(GEWW/) GE W.
                                                         Human 193P1E1B e
US2004102407-A1.
27-MAY-2004.
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Human 193P1E1B eptiope #799.
US2004102407-A1.
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27-MAY-2004.
                                                                                      ADP52925 standard; peptide; 10 AA.
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US2004102407-A1.
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Human 193P1E1B eptiope #3136.
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(GEWW/) GE W.
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L/) CHALLITA-EID
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) CHALLITA-EID
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         HUBERT R S.
GE W.
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JAKOBOVITS
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RESULT
                   ADP50609 standard; peptide; 10 AA.
Human 193P1E1B eptiope #803.
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Human 193P1E1B eptiope #3468.
US2004102407-A1.
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Human 193P1E1B eptiope #208.
US2004102407-A1
27-MAY-2004.
                                                                                                                                                                    ADP50589 standard; peptide; 10 AA.
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luman 193P1E1B eptiope #1885.
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Numan 193P1E1B eptiope #229.
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1228
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I/) FARIS M.
E/) HUBERT R S.
W/) GE W.
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//) CHALLITA-EID
//) FARIS M.
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CHALLITA-EID P M.
FARIS M.
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GE W.
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RESULT 1238
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RESULT 1235
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RESULT 1233
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RESULT 1237
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ESULT 1236
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US2004102407-A1.
27-MAY-2004.
                                                                                                                           ADP51377 standard; peptide; 10 AA.
Human 193P1E1B eptiope #1571.
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Human 193P1E1B eptiope #3563.
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Human 193P1E1B eptiope #465.
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Human 193P1E1B eptiope #1304.
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(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
                                                                                                                                                                                                                                                                                                                                                                                                                        JS2004102407-A1.
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(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADP50836 standard; peptide; 10 AA.
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(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
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L/) CHALLITA-EID F
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                                 JAKOBOVITS A.
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Best I
                                        W09509908-A1.
                                               Urea plasminogen
                                                                                                                                            ADP50844 standard; peptide; 10
Human 193P1E1B eptiope #1038.
US2004102407-A1.
                                                         AAR74926 standard;
                                                                                                                                                                                                                                                           ADP51187 standard; peptide; 10
Human 193P1E1B eptiope #1381.
                                                                                                                                                                                                                                                                                                                                                          US2004102407-A1.
                                                                                                                                                                                                                                                                                                                                                                 Human 193P1E1B eptiope #452.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human 193P1E1B eptiope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADP50041 standard; peptide;
                        (SUMU ) SUMITOMO
                                                                                                                                                                                                                                                                                                                                                                          ADPS0258 standard; peptide; 10 AA.
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Local Similarity 1244
                                                                                                                                                                             Local Similarity
                 Match
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                                                                                                                                                                                                    HUBERT R S.
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) CHALLITA-EID I
) FARIS M.
) HUBERT R S.
                                                                                                                                                                                                                    RAITANO A B. CHALLITA-EID FARIS M.
                                                                                                                                                                                                                                                                                                   JAKOBOVITS A.
                                                                                              HUBERT R S.
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GE W.
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GE W.
                                                                                        JAKOBOVITS
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                                                                                                                             RAITANO A B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; peptide; 1
3P1E1B eptiope #3313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            eptiope
O PHARM CO LTD.
0.8%; Score 6; Db
                                                i; peptide; 11 AA.
activator residues 173-182
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5 B
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.3e+02;
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Query Match
Best Local S
RESULT 1249
          Best Local Similarity RESULT 1253
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Best Local Similarity
RESULT 1251
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WO200104274-A2.
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WO200104274-A2.
18-TANI-200-
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Streptomyces venezuelae module
W0200104274-A2.
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Rat FAS peptide #1.
W0200104274-A2.
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Urea plasminogen activator residues 173-183.
                                                                                                                                                  Urea plasminogen WO9509908-A1.
                                                                                                                                                                                                                                       AAE10873 standard; peptide; 11 AA.
Bovine uroplakin II protein fragment
US6290959-B1.
                                                                                                                                                                                                                                                                                                                AAB68772 standard; peptide; 11 AA.
Caenorhabditis elegans FAS peptide #1.
WO200104274-A2.
18-JAN-2001.
                                                               Secreted protein WO9854963-A2.
 ABB50356 standard;
                                                                                      AAW88589 standard;
                                                                                                                                 (SUMU )
                                                                                                                                                                        AAR74922 standard;
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O.8%; Score 6
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                                           (HUMA-) HUMAN GENOME
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                                                                                                                                                                                                                                                                                           (CHIL-) CHILDREN'S HOSPITAL OAKLAND RES INST.
ry Match 0.8%; Score 6; DB 4;
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CY Match 0.8%; Score 6
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SUMITOMO PHARM CO LTD.
0.8%; Score f
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                                                                        d; protein; 12 AA.
encoded by gene 5
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protein; 12
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.8%; Score 6;
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o. 5.8e+02;
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o. 5.8e+02;
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                      2; Length 
.2e+02;
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.2e+02;
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Match

Best Local Similarity

RESULT 1260

ID ABG67423 stand

DE Human ADPT

PN WO2000
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                                                                                                                                     ABG67423 standard; peptide; 14 AA. Human ADPI tryptic digest peptide #132. WO200246767-A2.
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                                                                                                                                                                                                                          Human SNP related
                                                                                                                                                                                                                                                                                                    AAG98215 standard; peptide; 14 AA.
Human SNP associated peptide SEQ ID NO.
                                                                                                                                                                                                                                                                                                                                                                               AAE01945 standard;
Human Endotheliase
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(HUMA) HUMAN GENOME SCI INC.
0.8%; Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABO26093 standard;
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(RIKE) RIKEN KK.
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                                                           US2003064411-A1.
                                                                    ADA23531 standard; peptide; 14
Alzheimer's disease-associated
                                                                                                                                                                                                               WO200138586-A2.
                                                                                                                                                                                                                                  ABB56899 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABO44613 standard;
                                                                                               OXFO-) OXFORD GLYCOSCIENCES

Y Match 0.8%;
Local Similarity 100.0%;
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                                                                                       Local Similarity
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E/) PAREKH R B.
(L/) ROHLFF C.
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2 repetitive
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Score 6; 1
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    6; Length 14;
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Best Local Similarity
RESULT 1270
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HIV B cell epitope #
US2003049253-Al.
13-MAR-2003.
(LIFQ/) LI F Q.
(CHUY/) CHU Y.
(QIUJ/) QIU J.
                                                                                                       Human 193P1E1B protein WO2003050255-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO34421 standard; peptide; 14 AA. Synthetic apolipoprotein-E mimicking WO2004043403-A2.
                                     Human 193P1E1B protein WO2003050255-A2.
                                                                                                                                                                                              ADE01040 standard; peptide; 15 Human 193P1B1B protein peptide W02003050255-A2.
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Human 193P1E1B protein peptide
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                                                                                                                           ADE00912 standard; peptide; 15
Human 193P1E1B protein peptide
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WO2003050255-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human ribose phosphate WO200173065-A1.
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                                                         ADE00664 standard; peptide;
                                                                                                                                                                                                                                                                                                                                     (AGEN-) AGENSYS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAG78745 standard; peptide; 15
Human ribose phosphate glycine
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                                                                                                                                                                                                                                                                                                NDE00911 standard; peptide;
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#57.
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fragment 4031
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, 6; DB 4; Length 1
1. No. 7.6e+02;
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0. 7.6e+02;
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7.6e+02;
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.2e+02;
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.6e+02;
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.2e+02;
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Local Similarity

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Query Match
Best Local Similarity
RESULT 1278
ID ADP53837 standard; p
DE Human 193P1E1B eptic
PN US2004102407-A1.
PD 27-MAY-2004.
PA (RAIT/) RAITANO A B.
PA (CHAL/) CHALLITA-EID
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RESULT 1274
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                              ADP53837 standard; peptide; 15 AA.
Human 193P1E1B eptiope #4031.
US2004102407-A1.
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Human 193P1E1B protein peptide fragment 4061.
W02003050255-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE01108 standard; peptide;
Human 193P1E1B protein pept:
WO2003050255-A2.
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Human 193P1E1B protein pept:
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Human 193P1E1B pro
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Human 193P1E1B eptiope #3816.
US2004102407-A1.
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WO2003050255-A2.
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Human 193P1E1B eptiope #3903.
                                                                                                                                                                                                                                                                                                        US2004102407-A1.
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Human 193P1E1B protein peptide
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) CHALLITA-EID P M.
) FARIS M.
) HUBERT R S.
) GE W.
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) CHALLITA-EID
) FARIS M.
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RAITANO A B.
CHALLITA-EID P
                                                                                            JAKOBOVITS
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GE W.
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protein peptide
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peptide fragment
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peptide fragment 3957.
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.6e+02;
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.6e+02;
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Best Local Similarity
RESULT 1284
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Best Local Similarity
RESULT 1283
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Best Local Similarity 100.0%;
RESULT 1282
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RESULT 1280
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RESULT 1279
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Human 193P1E1B eptiope #3857.
US2004102407-A1.
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Human 193P1E1B eptiope #4099.
US2004102407-A1.
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Human 193P1E1B eptiope #3957.
US2004102407-A1.
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(HUBE/)
 ADP53607
                                                                                                       ADP53867 standard; peptide; 15
Human 193P1E1B eptiope #4061.
US2004102407-A1.
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                                                                                                                                                                                                                                                                                                                                                                             ADP53461 standard; peptide; 15
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(GEWW/) GE W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GEWW/) GE W
                                                                  (RAIT/) RAITANO A B.
(CHAL/) CHALLITA-EID
(FARI/) FARIS M.
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                                    HUBERT R S.
GE W.
JAKOBOVITS
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GE W.
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HUBERT R S.
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GE W.
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standard; peptide; 15
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7
                    3 8; Le
7.6e+02;
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.6e+02;
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RESULT
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222222222
                                                       ABU08144 standard; p
Human IL-1 RI signal
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ErbB ligand HB-EGF
                                                                                                                                  Insect haemolymph
WO9523513-A1.
                                                                                                                                                       WAR83657 standard;
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Wasp venom BrhTX-1
                                                                                                                                                                                                                                                                                                                                                                                                                 AAR74918 standard; peptide; 18 AA.
Urea plasminogen activator residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR83658 standard; peptide; 17 AA.
Insect haemolymph antibacterial polypeptide
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Human 193P1E1B eptiope #3902.
US2004102407-A1.
                                                                                     (SLOK ) SLOAN KETTERING INST CANCER RES.
TY Match 0.8%; Score 6; I
Local Similarity 100.0%; Pred. No.
                                                                                                                                                                                                                                                                               ZENE ) ZENECA LIU.
CSIR ) COMMONWEALTH
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                                                                                                                                                                                                JMOR ) UNIV MISSOURI.
                                                                                                                                                                           Local Similarity
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Match 0.8%; Score 6; DB 2; Length
cocal Similarity 100.0%; Pred. No. 8.6e+02;
                                                                                                                                                                                                                                                              ocal Similarity
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/) GE W.
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) CHALLITA-EID P M.
) FARIS M.
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/) FARIS M.
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th 0.8%; Score
Similarity 100.0%; Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RAITANO A B.
                          LAMBERT
                                                                                                                                         ; peptide; 20 AA.
antibacterial polypeptide
                                                       peptide; 2
al peptide.
                                                                                                                                                                                                                             peptide; 19 AA.
CCY/F motif peptide
                                                                                                                                                                                                                                                                                                                              peptide; 18 AA.
subunit (b) N-terminal
                                                                                                                                                                           100.0%;
     0.8%;
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Pred. No.
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5. 9e+02;
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5. 7.6e+02;
      DB 6; Le
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.5e+02;
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Best Loca
RESULT 1296
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RESULT 1293
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                                                                                                                                            Query Match
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OB-MAR-2001.

OB-WAR - 2001.

(USSH ) US DEPT HEALTH & HUMAN SERVICES.

0.8%; Score 6; I

01.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                   (LIFQ/) LI F Q. (CHUY/) CHU Y. (QIUJ/) QIU J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (LIFQ/) LI F Q. (CHUY/) CHU Y. (QIUJ/) QIU J.
         AAU89556 standard; peptide;
Insulin/insulin-like growth
                                                          (NOVO ) NOVO NORDISK AS.
                                                                                                                                                                                                                                                         HIV gp120 protein WO200116182-A2.
                                                                                                                                                                                                                                                                                                                                          HIV gp120 protein
WO200116182-A2.
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                                                                                                                                                                         HIV gp120 protein WO200116182-A2.
                                                                                                                                                                                                                                               08-MAR-2001.
                                                                                                                                                                                                                                                                              AAB89181 standard
                                                                                                                                                                                                                                                                                                                                                              AAB89179 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fungal mycotoxin
EP1329521-A1.
                                                                                         WO200172771-A2.
                                                                                                             AAU89796 standard;
                                                                                                                                                                                              AAB89180 standard
                                                                                                                                                                                                                                                                                                                                08-MAR-2001.
Insulin/insulin-like
VO200172771-A2.
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(LIFQ/) LI F Q.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN14077 standard;
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(EVIA/) EVIALIS T.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN14201 standard;
HIV B cell epitope
                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                     DGI BIOTECHNOLOGIES
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                                                                                                                                                                                                                DEPT HEALTH & HUMAN SERVICES.

0.8%; Score 6; DB

nilarity 100.0%; Pred. No. 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cell
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measurement-related
                                                                                                                                                                                                                                                               ; peptide; 21 AA.
binding peptide
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binding peptide #273.
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binding peptide
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ke growth
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#59.
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factor
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factor
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         receptor-binding
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. 9.9e+02;
                                       DB 5;
. 1e+03;
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BB
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9
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.9e+02;
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RESULTID 1
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Best Local Similarity
RESULT 1301
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RESULT 1307
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                                       09-AUG-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Sc
                                                               Peptide #4504 encoded by probe WO200157270-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           жыз1987 standard; peptide; 22 AA.
Peptide #4638 encoded by breast cell single exon nucleic acid probe.
MO200157271-A2.
                                                                                                                                                                                                                                                                                                         Human bone marrow expressed probe WO200157276-A2.
                                                                                                                                                                                                                                                                                                                                                                                                ABB22530 standard; protein; 22 AA. Protein #4529 encoded by probe for W0200157274-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM47407 standard; peptide; 22 AA. Peptide #37 for illustrating method W0200167299-A1.
                                                                                                          1020015 /4...
109-AUG-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score (
100.0%; Pred.
                                                                                                                                                      Human liver peptide, WO200157273-A2.
                                                                                                                                                                                                                                    Human brain exp
WO200157275-A2.
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(MOLE-) MOLECULAR DYNAMICS INC.
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                                                                                                                                                                          ABG52060 standard;
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ry Match 0.8%; Score
t Local Similarity 100.0%; Pred.
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ry Match 0.8%; Score
t Local Similarity 100.0%; Pred
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ry Match 0.8%; Score
Local Similarity 100.0%; Pred.
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            BG28549 standard;
                                local Similarity
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andard; protein;
diagnostic prote
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  cein; 22 AA.
protein #28540.
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1.1e+03;
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1e+03;
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1e+03;
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RESULT 1315
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RESULT 1311
                                      RESULT 1318
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Best Local Similarity
RESULT 1317
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                                                                                                                                         Human brain expressed WO200157275-A2.
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09-AUG-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score (
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09-AUG-2001.

(MOLE) MOLECULAR DYNAMICS INC.

0.8%; Score (
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09-AUG-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score
100.0%; Pred.
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                                                            (MOLE-) MOLECULAR DYNAMICS INC.
12Y Match 0.8%; Score
17 Local Similarity 100.0%; Pred.
                                                                                                                                                                                                                           (MOLE-) MOLECULAR DYNAMICS INC.
(YOLE-) MOLECULAR DYNAMICS INC.
(YOUR NAME OF THE ORDER OF THE O
                                                                                                                                                                                                                                                                                                             Human bone marrow WO200157276-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB24479 standard; protein; 23 Protein #6478 encoded by probe
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(UV5-APR-2004.

(BEIJ-) BEIJING FEIKAI BIOTECH CO LTD.

(BEIJ-) BEIJING FEIKAI BIOTECH CO LTD.

0.8%; Score 6; I

100.0%; Pred. No.
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ABG55067 standard; p
Human liver peptide,
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09-AUG-2001.
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0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-) MOLECULAR DYNAMICS INC.
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expressed
peptide;
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  N 23
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32 fragment :
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for measuring cervical gene expression.
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for measuring
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foetal liver
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                                                              DB 4; Le
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. 1.1e+03;
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1.1e+03;
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1.1e+03;
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RESULT 1324
ID ADR8408
DE S. PYOS
PN WO2004
PD 16-SEP-
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ID AAR749
DE Urea p
PN WO9509
PD 13-APR
RESULT
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DE At
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Urea plasminogen activator residues 163-186.
WO9509908-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human peptide encoded by genome-derived W0200186003-A2.
                                                                                    AAB91306 standard; peptide;
Atrial-natriuretic peptide (
                                                                                                                                                                                  AAR11853 standard, peptide; 27 
Eel natriuretic peptide.
                                                                                                                                                                                                                                                             S. pyogenes hype WO2004078907-A2.
                                                                                                                                                                                                                                                                                                                                                           AAU96113 standard; peptide; 25 AA.
Ehrlichia chafeensis P28 N-terminal signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP93093 standard; peptide; 25 AA. CD4 anti-receptor peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC.
AAB91315 standard; peptide; 27 AA.
Atrial-natriuretic peptide (ANP) (
                                                                                                                (SMIB-) SMI BRYSTOL KK.
(SUMQ ) SUMITOMO METAL IND LTD.

CY Match

Local Similarity 100.0%; Pred.
                                                                                                                                                                                                                                                                                  ADR84080 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ehrlichia chaffeensis
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY71483 standard; peptide; 25 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200157273-A2
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Y Match
Local Similarity 100.0%; Pred.
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Y Match 0.8%; Score
Local Similarity 100.0%; Pred.
                                                                                                                                                                                                                                                                                                                            RERE-) RES DEV FOUND.
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                                                     CONJ-) CONJUCHEM
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                               al Similarity
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                                                                                                                                                                                                                                                                      nndard; peptide; 26 AA.
hyperimmune system reactive antigen SPO0287.4.
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                                                                                    ; 27 AA.
(ANP) SEQ
                               Score
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b. 1.1e+03;
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. 1.3e+03;
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                                 4; Le
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.1e+03;
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.2e+03;
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.2e+03;
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Best Local Similarity
RESULT 1331
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RESULT 1328
                                                                                                         Best Local Similarity RESULT 1335
                                                                                                                                                                                     Best Local Similarity RESULT 1334
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RESULT 1329
                                               Query Match
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                                                                                                                                                                                                                                Urokinase peptide fragment from amino JP07075580-A.
AAR76947 standard; peptide; 30 AA. UK t-PA hybrid peptide CS16 residues WO9509908-A1.
                                                                                     AAR93591 standard; peptide; 30 AA.
UK t-PA hybrid peptide CS21 residues
                                                                                                                                                                  AAR93589 standard; peptide; 30 AA.
UK t-PA hybrid peptide CS19 residues
                                                                                                                                                                                                                                                                                                                             AAR42811 standard; peptide;
u-PA (159-188)
                                                                                                                                                                                                                                                                                                                                                                                               AAR26347 standard; peptide; 30 Spacer oligopeptide D30. JP04190791-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR71663 standard; peptide; 2 Modified urinary plasminogen Jp07039374-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR26346 standard; peptide; 28
Spacer oligopeptide D28.
JP04190791-A.
                                                                                                                                                WO9509908-A1.
13-APR-1995.
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(CONJ-) CONJUCHEM INC.
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(SUMU ) SUM
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                                                          (SUMU)
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0.8%; Score f
                                                                                                                                                                                                         SUMITOMO SEIYAKU KK.
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h 0.8%;
Similarity 100.0%;
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0.8%; Score 6;
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peptide (
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Pred. No.
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No.
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                                                                                                                                                                                                                                                 acids 159-188
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b. 1.3e+03;
                                     DB 2; Le
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18
                                                                                                                                                                                               DB 2; Length . 1.4e+03;
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. 1.4e+03;
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1.4e+03;
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Best Local Similarity
RESULT 1345
ID ABB35004 stand
DE Peptide #7
PN WO200
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UK t-PA hybrid peptide CS15 residues
                            ABB35004 standard; peptide; 33 AA.

Peptide #2510 encoded by human foetal liver single exon probe.
W0200157277-A2.
                                                                                                                                                                   AAM16011 standard; protein;
Peptide #2445 encoded by pro
WO200157278-A2.
09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                AAR24949 standard;
Urokinase fragment.
JP04144682-A.
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t-PA peptide fragment
JP07075580-A.
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UK t-PA hybrid peptide CS12 residues
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9-AUG-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score
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h 0.8%; Score
Similarity 100.0%; Pred.
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ent from a
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0.8%;
100.0%;
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probe
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.5e+03;
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.5e+03;
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Best Local Similarity RESULT 1346
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RESULT 1350
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09-AUG-2001.
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(MOLE-) MOLECULAR DYNAMICS INC.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptide #2549 encoded by probe W0200157272-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human bone marrow expressed WO200157276-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC.
2. match 0.8*; Sc
                                                                                                                                                            AAM03745 standard; protein; 33 Peptide #2427 encoded by probe W0200157270-A2.
                                                                                                                                                                                                                                                                                                                        Human brain expressed single WO200157275-10
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ry Match 0.8%; Score
t Local Similarity 100.0%; Pred.
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ry Match 0.8%; Score
t Local Similarity 100.0%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                             07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                      Human polypeptide
WO200164835-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                         AAO00415 standard;
ABP72759 standard;
Antiulcer peptide (
WO2003013569-A2.
                                                                               Antiulcer peptide
WO2003013569-A2.
                                                                                                 ABP72758 standard;
                                                                                                                    WO200157273-A2.
                                                                                                                                                                                                                                                    ABG49840 standard; peptide; 33 AA.
Human liver peptide, SEQ ID No 28488.
                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC.
ry Match 0.8%; Score
t Local Similarity 100.0%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                  (HYSE-) HYSEQ INC
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9-AUG-2001.

9-AUG-2001.

MOLE-) MOLECULAR DYNAMICS INC.

0.8%; Score (
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                                                                                                                   Local Similarity
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                                                          UNIV TEXAS SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                               ; protein; 33 AA.
SEQ ID NO 14307.
          peptide; 33 derived from
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                                        0.8%;
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            thrombin
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.6e+03;
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                                                                                                   Human prostate cancer-associated p
BE1911194-A1.
                                                                                                                                                                                                        AAW21577 standard; protein;
Alzheimer's disease protein
                                                                                                                                                                                                                                                                                                           AAR97691 standard; protein; 37 Rat FE65 WW domain-1.
                                                                                                                                                                                                                                                                                                                                                                                       Human polypeptide WO200164835-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human LDL receptor A domain peptide SeqID W02004044011-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY39987 standard; peptide; 35 AA.
HIV Negative factor (Nef) protein
                                AAB21981 standard;
FE65/rat peptide co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV Negative
US5968514-A.
                                                        (META-) METAGEN GES GENOMPORSCHUNG MBH.

(META-) METAGEN GES GENOMPORSCHUNG MBH.
                                                                                                                                                                                               Alzheimer's disease
WO9721807-Al.
                                                                                                                                                                                                                                    AAO02449 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABU61264 standard;
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                                                                                                                                                                                                                                                                                                                                                                HYSE-) HYSEQ INC.
                                                                                                                                                    Local Similarity
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BETH ISRAEL DEACONESS MEDICAL CENT
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                             d; peptide; 37 AA.
containing a WW-domain
                                                                                                                                                                                                                                                                                                                                                                                                 ; protein; 36 AA. SEQ ID NO 16341.
                                                                                                                                                                KOGYO KK.
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encoded
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Pred. No.
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No.
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Query Match
Best Local Similarity
RESULT 1364
                                Best Local Similarity RESULT 1372
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR74067 standard; peptide; 38 AA.
Superantigen peptide HIV Nef(1-38)
W09511975-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUL-2003.
(UYNE-) UNIV NEWCASTLE VENTURES LTD.
0.8%; Score 6;
AAE32648 standard; peptide; 39 AA.
Albumin-CD4 fusion protein junction peptide
WO200279415-A2.
                                                                                                                                                                                                                                                                     Urinary plasminogen JP06327473-A.
                                                                                                                                                                                                                                                                                                                                      (PENN/) PENN S G.
(RANK/) RANK D R.
(HANZ/) HANZEL D K.
                                                                                                                                                                                                                                                                                                                                                                                    ABO58270 standard; protein; Human genome derived single US2003194704-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYFL)
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W02003057708-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABR83566 standard; protein; 37 AA. Colicin N 40-76 amino acid sequence
                                                                                                   Human albumin-CD4
                                                                                                                                                                             Human polypeptide
WO200164835-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB70442 standard; peptide; 38
L. lactis signal peptide SP310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYFL )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY39972 standard; peptide; 38 AA.
HIV Negative factor (Nef) protein
                                                                                                            AAE32936 standard;
                                                                                                                                                        (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                             AAR64211 standard;
                                                                                                                                                                                                     AAO11683 standard;
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0.8%;
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h 0.8%;
Similarity 100.0%;
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                                                                                                                                                                                        ; protein; 39 AA. SEQ ID NO 25575.
                                                                                               peptide; 39 AA. fusion protein junction
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                                                                                                                                                                                                                                                                                  residues 150-188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA. mutant amino acid sequence SEQ:55.
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₃ 6;
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1
                                                                                                                                  DB 4; Length . 1.8e+03;
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                                                                                                                                                                                                                           DB 2; Length
. 1.8e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                 #4504
                                            6; Length .8e+03;
                                                                                                peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Length 
.8e+03;
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.7e+03;
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mest Local Similarity
RESULT 1373
ID ADP75022 Star
DE Human
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RESULT 1375
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BBBBB
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RESULT 1376
                                     RESULT 1381
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Best Local
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Human genome derived single US2003194704-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADF75022 standard; peptide; 39 AA. Human serum albumin-CD4 fusion protein US2003166877-A1.
                                                                                  AAO02438 standard;
Human polypeptide s
WO200164835-A2.
                                                                                                                                                                      WO9716542-A1.
                                                                                                                                                                               AAW24782 standard; peptide; 42 AA.
Adhesin PrtR44 N-terminal peptide.
                                                                                                                                                                                                                                                Melanocyte-stimulating EP389950-A.
                                                                                                                                                                                                                                                                    AAR07101 standard;
                                                                                                                                                                                                                                                                                                                         Influenza A virus
WO200224734-A2.
                                                                                                                                                                                                                                                                                                                                             AAE23150 standard;
                                                                                                                                                                                                                                                                                                                                                                                                   AAB09340 standard; protein; 40 AA.
Hepatitis GB virus protein sequence SEQ
US6051374-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human prostate cancer-associated DE19811193-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY48263 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAY-1987.
(HARD ) HARVARD COLLEGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antigenic peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAP71494 standard; protein; 40 AA
                                                                                                                                                                                                                                                                                                                                                                                  L8-APR-2000.
(ABBO ) ABBOTT LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (LEXI-) LEXIGEN PHARM CORP.

CY Match 0.8%;

Local Similarity 100.0%;
                                                                                                                                          (UYME ) UNIV MELBOURNE.
(VICT-) VICTORIAN DAIRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (META-) METAGEN GES
                                                                HYSE-) HYSEQ INC
                                                                                                                                                                                                                             LIOY ) LION CORP.
                                             Local Similarity
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                                                                                                                                                                                                                                                                                                       CHIRON SPA
                                                                                             ; protein;
SEQ ID NO
                                                                                                                                                                                                                                                                                                                                   subtype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cross-reactive
                                                                                                                                                                                                                                                                                                                                            peptide;
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                  single exon protein #6830.
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                                                                                                                                                                                                                                                         tein; 41 AA.
hormone inhibitor #6
                                                                                                                                          IND
                                                                                                                                                                                                                                                                                                                                 e; 40 AA.
16 haemagglutinin
                                                                                                                       D AUTHORITY.
; Score 6; DB :
%; Pred. No. 1.:
                                                                                             42 AA.
16330.
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1.9e+03;
                                              DB 4; Le
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. 1.9e+03;
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18
                                                                                                                                                                                                                                                                                       DB 5; Length
1.9e+03;
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                                                                                                                        DB 2; Lo
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                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Le
.9e+03;
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.8e+03;
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.8e+03;
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Query Match
Best Local S
RESULT 1389
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Best Local Similarity
RESULT 1383
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RESULT 1385
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         Best Local Similarity RESULT 1390
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                                                                                                                                                                                                                                                                                                                   ABG77431 standard; protein; Selected Interacting Domain WO200259255-A2.
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Human-223 cadherin-related wo9414960-A2.
                                                                                                                                                                                                                                                                                              01-AUG-2002.
(HYBR-) HYBRIGENICS.
                                                                                                                                                                                                                                                                                                                                                           04-NOV-1207.

(REGC ) UNIV CALIFORNIA.

(REGC ) UNIV CALIFORNIA.

17 MATCH 0.8%;

17 MATCH 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                              04-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY21020 standard;
Human glial fibrill
WO9845322-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR87135 standard; peptide; 43 Protocadherin clone HUMAN-223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PENN/) PENN S G.
(RANK/) RANK D R.
(HANZ/) HANZEL D K.
                                                            DT-binding receptor WO2004069870-A2.
                                                                                                                                               DT-binding receptor region of HB-EGF WC2004069870-A2.
                                                                                                                                                                                                                                             AAE30226 standard; peptide; 43 AA.
Human LP288 YWTD island 2 repeat peptide
                                                                                                                                                                                                                                                                                                                                                                                                                 AAY32350 standard; peptide; 43
Human ClqRp EGF-2 peptide.
                                 (UYLE-) RIJKSUNIV LEIDEN.
                                                                      ADR51550 standard; protein;
DT-binding receptor region of
                                                                                                                19-AUG-2004.
(UYLE-) RIJKSUNIV LEIDEN.
0.8%;
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                                                                                                                                                                     ADR51552 standard; protein;
                                                                                                                                                                                                             (ELIL ) LILLY & CO
                                                                                                                                                                                                                         26-SEP-2002
                                                                                                                                                                                                                                   WO200274906-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ROYA-) ROYAL NETHERLANDS ACAD (UYRO-) UNIV ROTTERDAM ERASMUS. (UYUT-) RIJKSUNIV UTRECHT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DOHE-) DOHENY EYE INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DOHE-) DOHENY EYE
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fibrillary acidic prot
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0.8%;
100.0%;
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protein; 44
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1 molecule.
                                                                        of HB-EGF
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(SID)
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                                                                                                        DB 8;
. 2e+03;
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. 2e+03;
                      DB 8;
. 2e+03;
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. 2e+03;
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RESULT
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                                                                                                                                                           ABB33178 standard; peptide; 45 AA.
Peptide #684 encoded by human foetal liver single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DT-binding receptor WO2004069870-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DT-binding receptor WO2004069870-A2.
                                                                              AAM26641 standard; protein; 45 AA.
Peptide #678 encoded by probe for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Urinary plasminogen
JP06327473-A.
  ABB28006 standard;
Human peptide #657
                                                                                                                                                                                                                                           Peptide #665
                                                                                                                                                                                                                                                    AAM14231 standard;
                                                                                                                                                                                                                                                                                                               Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                         AAG21119 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADR51549 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human polypeptide
WO200164835-A2.
                                                                                                                                                                                     J200157276 ...
9-AUG-2001.
9-AUG-2001.
0.8%; Score 6
0.8%; Pred.
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                                                                                                          Local Similarity
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                                                                                                          JE-) MOLECULAR DYNAMICS INC.
Match 0.8%; Score
cal Similarity 100.0%; Pred.
                             E-) MOLECULAR DYNAMICS INC.
(atch 0.8%; Score
scal Similarity 100.0%; Pred.
                                                                                                                                                  0157277-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMITOMO SBIYAKU KK.
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h 0.8%;
Similarity 100.0%;
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                                                                                                                                                                                                                                         ndard; protein; 45 AA.
encoded by probe for
                                                                                                                                                                                                                                                                                                              protein; 45 AA.
na protein fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide; 45
n activator :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
 peptide; 45 AA.
encoded by breast
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                                                                                                                                                                                                                                                                        0.8%;
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n fragment
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Pred.
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Best Local Similarity RESULT 1408
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Human polypeptide WO200164835-A2.
                                                                                                                                                             ABB03327 standard; protein; 46
Human musculoskeletal system re
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Antipsoriatic proto
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Peptide #645 encoded by probe
WO200157270-A2.
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(MOLE:) MOLECULAR DYNAMICS INC.
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Human liver peptide, SEQ ID
                                    AAO01399 standard;
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               protein; 46 AA.
SEQ ID NO 15291.
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RESULT 1415
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                                                                          AAM47202 standard; peptide; 47 AA. Modular enzyme system related ACP-domain W0200181564-A2.
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Human polypeptide;
WO200164835-A2.
Human 193P1E1B | WO2003050255-A2
       ADD96929 standard; protein; 47 AA.
Human 193P1E1B protein variant 1 fragment
                                                                                                                                               AAG18782 standard; protein; 47 AA. Zea maye protein fragment SEQ ID NO: EP1033405-A2.
                                                                                                                                                                                                                                                                                                                     Staphylococcus epidermis polypeptide seqid US2004147734-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABU12621 standard; protein;
Novel human musculoskeletal
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WO200268693-A2.
                                                                                                                                       06-SEP-2000.
                                                                                                                                                                                                                                                                                                                                          ADS07325 standard; protein; 46 AA.
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                                                         (ACTI-) ACTINODRUG
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(RUBE/) RUBEN S M.
(BARA/) BARASH S C.
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                                                                                                                                                           20328.
                                                                                                                                                                                                                                                                     DB 8; Ler
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                                                                                                                                                                                                                                                                                                                                                             DB 8; Le:
. 2.1e+03;
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                                                                                                                                                                                       DB
2.
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                                                                                                                   DB 3; Length
. 2.2e+03;
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28
                                                                                                                                                                                                                                                                                                                                                                                                             protein -
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                                                                                       N-terminal
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                                      5; Le:
.2e+03;
         #2
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.2e+03;
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                                                                                      peptide AVEAI_3.
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Query Match
Best Local Similarity
RESULT 1418
ID ADP49728 standard; po
DE Human 193P1E1Bv.1.
PN US2004102407-A1.
PD 27-MAY-2004.
PA (RAIT/) RAITANO A B.
PA (CHAL/) CHALLITA-EID
PA (FARI/) FARIS M.
PA (HUBE/) HUBERT R S.
                                                                                                                                                                                                                                                                                                                           Query Matc
Best Local
RESULT 1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
RESULT 1419
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RESULT
                        Query Match
Best Local Similarity
RESULT 1425
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
RESULT 1421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                            Query Match
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                                                                                                                                                                               ABB38598 standard; peptide; 49 
Peptide #6104 encoded by human 
WO200157277-A2.
                                                                                                                                                                                                                                                                                         ADN48881 standard; peptide; 48 AA.
Heparin-binding epidermal-growth factor (HB-EGF)
US6727077-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB33113 standard; protein; 48 AA. Pinus radiata transcription factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADP49728 standard; peptide; 47
Human 193PLEIBv.1.
US2004102407-A1.
27-MAY-2004.
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(AGEN-) AGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRO566 protein.
 AAM71762 standard;
Human bone marrow &
                                                                                   Peptide #6091 e WO200157272-A2.
                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC.
ry Match 0.8%; Sc
t Local Similarity 100.0%; F
                                                                                                                                                                                                                                                                                                                                                              (CSIR) COMMONWEALTH SCI & IND RES ORG.

(BIOM-) BIOMOLECULAR RES INST LTD.

(HALL-) HALL INST MEDICAL RES WALTER & ELIZA.

(LUDW-) LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAE36818 standard; protein;
Human HB-EGF domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABP43712 standard; protein; 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200053724-A2.
                                                           (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                           AAM32054 standard; protein; 49
                                                                                                                                                                                                                                          (HUMA-) HUMAN GENOME SCI INC.
(GEOU) UNIV GEORGETOWN MEDICAL CENT.
0.8%; Score 6;
                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003014159-A1.
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(FLET-) FLETCHER CHALLENGE FORESTS
TY MALCh 0.8%; Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GEWW/) GE W.
(JAKO/) JAKOBOVITS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RAIT/) RAITANO A B. (CHAL/) CHALLITA-EID (FARI/) FARIS M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (HYSE-) HYSEQ INC.
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expressed probe
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E 6; DB
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.2e+03;
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.2e+03;
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.2e+03;
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.2e+03;
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                                                                                              gene
                                                                                                                                                                                             probe.
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encoded

protein SEQ

IJ

NO:

32068

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RESULT
ID AA
DE Px
PN WC
PD 01
PA (C
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                                                                                                                                                                                                                          AAG37508 standard; pi
Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                      Human peptide encoded WO200186003-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human liver peptide, WO200157273-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAM59226 standard; protein; 49 AA.
Human brain expressed single exon
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(MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABG53447 standard; peptide; 49 AA.
Human liver peptide, SEQ ID No 32095.
                                 AAU40213 standard;
                                                                                    NO200157276-A2.
                                                                                            Human bone marrow
                                                                                                      AAM70055 standard;
                                                                                                                                                                                                                                                                                      Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                AAG04489 standard;
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                                                                                                                                                                                                                                                                                                                                                                   ADK14940 standard; protein;
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(MOLE-) MOLECULAR DYNAMICS INC.
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Y Match 0.8%; Score 0.0%; Pred.
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Match 0.8%; Score
scal Similarity 100.0%; Pred.
                                                                                                                                                       0157274-A2.
                                                                                                                                                                                                                                                                                                                                  D-) DIADEXUS INC.
                                                                                                                             E-) MOLECULAR DYNAMICS atch 0.8%;
                                                                  E-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                   33405-A2.
                                                                                                                                                                229 standard;
in #4228 encod
                                                                                                                                                             dard; protein; 50 encoded by probe
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                         acnes
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                        protein; 50 AA.
acnes immunogenic protein #1109
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protein fragment
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                                                                                                                   3 INC.
%; Score
0%; Pred.
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n fragment
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probe
                                                  Score; Pred.
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Pred.
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Pred
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Pred. No.
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Pred. No.
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                                                 4; Length 50; .3e+03;
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Best Local Similarity RESULT 1435
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RESULT 1436
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAM05532 standard; protein; 50 Peptide #4214 encoded by probe WO200157270-A2.
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(MOLE-) MOLECULAR DYNAMICS INC.

0.8%; Score (
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WO200157273-A2.
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Human liver peptide, SEQ ID
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109-AUG-2001.

(MOLE-) MOLECULAR DYNAMICS INC.

0.8%; Score /
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WO200157275-A2.
                                                               AAG04488 standard; protein; 51 AA.
Arabidopsis thaliana protein fragment
                                                                                                                                         AAW67925 standard; protein; 51 AA. Fragment of human secreted protein
                                                                                                                                                                                                                                      AAE36799 standard; protein; 50 AA.
Human HB-EGF protein EGF-like domain.
WO2003014159-A1.
                                                                                                                                                                                                                                                                                                                                                  020018000-
15-NOV-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score (
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Human brain expressed single exon
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                                                                                                                                                                                                                                                                                                                          Propionibacterium
         AAG37507 standard; protein;
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                           Local Similarity
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                                                                                                              HUMAN GENOME SCI INC.
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.3e+03;
                            3; Length 
.3e+03;
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.3e+03;
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Best Loca
RESULT 1452
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                      Propionibacterium acnes immunogenic WO200181581-A2.
                                                                                                                                                                                                                                            Human immune/haematopoietic WO200157182-A2.
                                                                                                                                                                                                                                                                                                                          AAR45144 standard;
Plasmid pCDM8-D09 -
WO9324624-A1.
                                                                                                   Urinary plasminogen JP06327473-A.
                                                                                                                                                                                     Sucrose transporter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Propionibacterium WO2003033515-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABP11027 standard;
Human ORFX protein
WO200192523-A2.
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                                                                                                                                                                            WO200144476-A2.
                                                                                                                                                                                               AAM00082 standard;
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(SUMU ) SUMITOMO PHARM CO LTD.

0.8%; Score (

100.0%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                           AAW21562 standard; protein; 52 AA.
LETO rat cholecystokinin-A receptor fragment,
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                                                                                                                                                                                                                                                                                                                                                                          (SHIO ) SHIONOGI & CO LTD.
0.8%
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                                                                        SUMU ) SUMITOMO SEIYAKU KK.

y Match

0.8%;
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           CORIXA CORP.
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n acnes pred
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                                                                                                             peptide; 54
n activator 1
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r sequence #150.
                                                                                                                                                                                                                                                                                                                                              protein; 53 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein;
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predicted
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                                                                                                                                                                                                                                                            53 AA.
antigen
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SEQ ID NO:22036
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residues
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5e+03;
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Best Local Similarity
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Best Local Similarity
RESULT 1457
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                                                                                                                                                                                                                                                                                                                                                                                            ABM35847 standard; protein; Propionibacterium acnes pred WO2003033515-A1.
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Propionibacterium acnes imm
                                                                                                                                                                                                                                                    AAR45146 standard; protein; 56 AA.
Plasmid pCDM8-D09 - D44 fragment E
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WO200277021-A2.
                                                                                           EP1033405-A2.
                                                                                                   Arabidopsis thaliana
                                                                                                                                                                   Tissue plasminogen
JP06327473-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABM42757 standard; protein;
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                           EP1033405-A2.
                                    Arabidopsis
                                             AAG55284 standard;
                                                                                                           AAG21118 standard; protein; 56 AA.
                                                                                                                                                                                      AAR64210 standard;
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                                                                                                                                                                                                                                                                                                  (SUMU ) SUMITOMO
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                                                                                                                                       (SUMU ) SUMITOMO SEIYAKU KK.
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1993.
SUMITOMO PHARM CO LTD.
0.8%; Score 6
Similarity
                                   andard; protein; E
thaliana protein
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0.8%; Score 6;
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immunogenic
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.5e+03;
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RESULT
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Peptide #936 encoded
WO200157277-A2.
                                                       Peptide #891 encoded by probe f
WO200157270-A2.
                                                                                                                                                 ABG48277 standard; peptide;
Human liver peptide, SEQ ID
WO200157273-A2.
                                                                                                                                                                                                                                    AAM54215 standard; protein; 56 AA. Human brain expressed single exon probe WO200157275-A2.
                                                                                                                                                                                                                                                                                                                                              AAM66609 standard;
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WO200157271-A2.
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ABP05146 standard; protein; 56 AA
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ry Match 0.8%; Score
Local Similarity 100.0%; Pred.
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9-AUG-2001.
9-AUG-2001.
0.8%; Score /
0.0%; Pred.
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Match 0.8%; Score
Ocal Similarity 100.0%; Pred.
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.0G-2001.
.B-) MOLECULAR DYNAMICS INC.
.0.8%; Score
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2001.
MOLECULAR DYNAMICS INC.
0.8%; Score f
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th 0.8%; Score
Similarity 100.0%; Pred.
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th 0.8%; Score
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h 0.8%; Score
Similarity 100.0%; Pred
                                          MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ndard; protein; 56 encoded by probe
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                                          DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                  expressed
                                                                                                                                                                                                                                                                                                                                                                                                                     protein; 56 AA.
ed by probe for measuring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide; 56 AA.
encoded by breast
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ed by human f
                      100.0%;
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                     Score; Pred.
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foetal
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                                                                                                                                                           AA.
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                                                                                             AAO02406 standard;
Human polypeptide S
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W09324624-A1.
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EP1033405-A2.
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            AAB41904 standard;
Human ORFX ORF1668
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WO200164835-A2.
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                                                              (HYSE-) HYSEQ INC.
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Thermococcus kodakaraensis i
WO2004022736-A1.
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5-NOV-2001.
(MOLE-) MOLECULAR DYNAMICS INC.
0.8%; Score
100.0%; Pred.
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SUMITOMO PHARM CO LTD.
0.8%; Score (
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h 0.8%; Score (
Similarity 100.0%; Pred.
                                                ; protein;
SEQ ID NO
                                                                                                 seQ ID NO
protein; 59 polypeptide
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D44 fragment I
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25008.
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Query
Best Loc.
RESULT 1487
ID AAU65
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Best Local Similarity
RESULT 1489
ID ABM39640 standard; p
DE Propionibacterium ac
PN WO2003033515-Al.
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RESULT 1486
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RESULT 1485
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WO200121658-A1.
29-MAR-2001.
(HUMA-) HUMAN GENOME SCI INC.
 ABM39640 standard; prote Propionibacterium acnes WO2003033515-A1.
                                                                   ABM61735 standard; prote
Propionibacterium acnes
WO2003033515-A1.
24-APR-2003.
                                                                                                                                                          Propionibacterium acnes immunogenic WO200181581-A2.
                                                                                                                                                                                                                                      AAU43121 standard; protein; 59 AA. Propionibacterium acnes immunogenic WO200181581-A2.
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(CURA-) CUR
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                                                                                     protein; 59 AA.
acnes predicted
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BEECHAM PLC.
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                    protein; 59 AA
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7e+03;
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7e+03;
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Best Local Similarity RESULT 1498
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RESULT 1496
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Best Local Similarity
RESULT 1492
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Best Local Similarity
RESULT 1490
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Human brain expressed single exon probe encoded protein SEQ ID NO: WO200157275-A2.
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Peptide #9225 encod
WO200157277-A2.
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(CORI-) COR
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                                                                                             Propionibacterium WO200181581-A2.
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ry Match 0.8%; Score
t Local Similarity 100.0%; Pred.
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                                                                                                                  AAU61570 standard;
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Human bone marrow expressed probe
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                                                                        (CORI-) CORIXA CORP.
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MOLECULAR DYNAMICS INC.
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ALIGNMENTS RESULT 1	D71698 C96618 T38210 AG1482 AB3038 AB3053 T40992 G95405 G95405 H91058 AB0830
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A;Residues: 1-181 <ANS>
A;Residues: 1-181 <ANS>
A;Experimental source: adult uterus; clone DKFZp586H2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Ansorge, W.; Wirkner, U.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S. submitted to the Protein Sequence Database, May 1999
A;Reference number: Z16472
A;Accession: T08805
                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Note: DKFZp586H2123.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Species: Homo sapiens (man)

Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004

Accession: T08805
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Best Local Similarity 100.0%; Pred. No. 2.4e-182;
Matches 178; Conservative 0; Mismatches 0;
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124 AETGGIAAVSFFGRASPEFRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWIERNMK 181
                               663 AETGGIAAVSFPGRASPEPRWHLMGLVSWSYDKTCSHRLSTAFTKVLPFKDWIERNMK 720
                                                                                                                                         603 VLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICT 662
                                                                                                                                                                                                                                                   543 ISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSPQESHITVAGWN 602
                                                                                                            64 VLADVRSPGFKNDTLRSGVVSVVDSLLCEEQHEDHGIPVSVTDNMFCASWEPTAPSDICT 123
                                                                                                                                                                                                                   4 ISAIILHPNYDPILLDADIAILKLLDKARISTRVQPICLAASRDLSTSFQESHITVAGWN 63
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hypothetical protein aq.836 - Aquifex aeolicus C;Species: Aquifex aeolicus C;Date: 08-May-1998 #sequence\_revision 08-May-1998 #text\_change 09-Jul-2004 C;Accession: E70372 ;Deckert, G.; Warren, P.V.; Gaasterland, T.; Young, W.G.; Lenox, A.L.; Graham,

D.B.; Š

Nature 392, 353-358, 1998
A;Title: The complete genome of the hyperthermophilic bacterium Aquifex aeolicus.
A;Reference number: A70300; MUID:98196666; PMID:9537320
A;Accession: E70372
A;Accession: E70372
A;Status: preliminary; nucleic acid sequence not shown; translation not shown

\;Gene: aq\_836 ,;Molecule type: DNA ,Residues: 1-232 <AQF> ,Residues: 1-232 <AQF> ,Cross-references: UNIPROT:O67008; GB:AE000709; NID:g2983373; PIDN:AAC06970.1; PID:g298: ,Experimental source: strain VF5 Genetics:

Query Match 1.2%; Score 9; DB 2; Length 232; Best Local Similarity 100.0%; Pred. No. 0.45; Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0

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F;322-431/Domain: Clr/Cls repeat homology <CIR1>
F;432-441/Domain: Clr/Cls repeat homology <CIR2>
F;435-544/Domain: Clr/Cls repeat homology <CIR2>
F;551-887/Domain: EGF homology <EGF>
F;591-700/Domain: Clr/Cls repeat homology <CIR3>
F;91,700/Domain: Clr/Cls repeat homology <CIR3>
F;142,332,363,599/Binding site: carbohydrate (Asn) (covalent) #status predicted F;163-319,105-205,322-348,375-397,435-461,488-510,551-563,559-572,574-587,591-617,6
F;213,217,223,272/Binding site: zinc (His, His, His, Tyr) #status predicted F;214/Active site: Glu #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,Description: catalyzes hydrolysis of the carboxyl-terminal propeptide of collagen type (S,Superfamily: procollagen C-endopeptidase; astacin homology; CIr/CIs repeat homology; CC;Keywords: alternative splicing; beta-hydroxyasparagine; bone; calcium; duplication; g: F,1-22/Domain: signal sequence #status predicted <STG>
F,23-730/Product: procollagen C-endopeptidase splice form BMP1 #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               procollagen C-endopeptidase (EC 3.4.24.19) precursor, splice form BMP1 - hum N;Alternate names: bone morphogenic protein 1 (BMP1) C;Species: Homo sapiens (man) C;Date: 16-Sep_1992 #sequence_revision 03-Aug-1995 #text_change 18-Jun-1999 Mtg-1995 Mt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Wozney, J.M.; Rosen, V.; Celeste, A.J.; Mitsock, L.M.; Whits
Science 242, 1528-1534, 1988
A;Title: Novel regulators of bone formation: molecular clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         믕
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R;Parkhill, J.; Barrell, B.G.; Rajandream,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ketoacyl reductase homolog - Streptomyces coelicolor
C;Species: Streptomyces coelicolor
C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Note: SC1F2.16c
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A;Accession: T29125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A, Map position: 8p21-8p21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-730 < WOZ>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Accession: A37278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Reference number: A37278; MUID:89072730; PMID:3201241
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Gene: GDB:BMP1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: GDB:125203; OMIM:112264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cross-references: GB:M22488; NID:g179499; PIDN:AAA51833.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Accession: A37278; E58788
                                                                                                                                                                                                  565/Modified
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                                                                                                                                                                                              site: erythro-beta-hydroxyasparagine
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                                                                   1.2%; Score 9; 100.0%; Pred. No.
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; Pred. No.
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                                                                   DB 1;
c. 1.3;
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                                                                                                             Length 730;
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                                                                                                                                                                                              (Asn) #status predicted
                                      Indels
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                                      Gaps
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                                                                                                                                                                                                                                                                      procollagen C-endopeptidase (EC 3.4.24.19) precursor, tolloid-like splice NyAlternate names: bone morphogenic protein 1, tolloid-like splice form C;Species: Homo sapiens (man) C;Species: Homo sapiens (man) C;Date: 28-Mar-1998 #sequence revision 09-Apr-1998 #text_change 09-Jul-200 C;Accession: A37278; B58788
                                                                       R; Wozney, J.M.; Rosen, V.; Celeste, A.J.; Mitsock, L.M.; Whitt Science 242, 1528-1534, 1988
A; Title: Novel regulators of bone formation: molecular clones A; Reference number: A37278; MUID:89072730; PMID:3201241
A; Accession: A37278
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A; Molecule type: mRNA
A; Residues: 1-702, 'EK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B58788
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C;Superfamily: procollagen C-endopeptidase; astacin homology; Clr/Cls repeat homoloc; Reywords: alternative splicing; beta hydroxyasparagine; bone; calcium; duplicatio F;1-22/Domain: signal sequence #status predicted <SIG>
F;23-823/Product: procollagen C-endopeptidase splice form HIS #status predicted <MP;33-321/Domain: stacin homology <AST>
F;32-431/Domain: Clr/Cls repeat homology <ClR1>
F;435-944/Domain: Clr/Cls repeat homology <ClR2>
F;551-587/Domain: EGF homology <EGF>
F;591-700/Domain: Clr/Cls repeat homology <ClR3>
F;591-700/Domain: Clr/Cls repeat homology <ClR3>
F;738-752/Region: histidine-rich carbohydrate (Asn) (covalent) #status predicted F;163-319,185-205,322-348,375-397,435-461,488-510,551-563,559-572,574-587,591-617,6
F;213,217,223,272/Binding site: zinc (His, His, His, Tyr) #status predicted F;214/Active site: Glu #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: mRNA
A;Residues: 1-702,'EKRPALQPPRGRPHQLKFRVQKRNRTPQ' <WOZ>
A;Residues: 1-702,'EKRPALQPPRGRPHQLKFRVQKRNRTPQ' <WOZ>
A;Cross-references: GB:M22488; NID:g179499; PIDN:AAA51833.1; PID:g179500
R;Takahara, K.; Lyons, G.E.; Greenspan, D.S.
J. Biol. Chem. 269, 32572-32578, 1994
A;Title: Bone morphogenetic protein-1 and a mammalian tolloid homologue (mTld) are encode A;Reference number: A58788; MUID:95096114; PMID:7798260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Novel regulators of bone formation: molecular clones A;Reference number: A37278; MUID:89072730; PMID:3201241 A;Accession: A37278
                                                                                                                                                                                                                              F;213,217,223,272/Binding site: zinc (His, His, His, Tyr) #status F;214/Active site: Glu #status predicted F;565/Modified site: erythro-beta-hydroxyasparagine (Asn) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position: 8p21-8p21
C; Function:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R; Wozney, J.M.; Rosen, V.; Co
Science 242, 1528-1534, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   procollagen C-endopeptidase (EC 3.4.24.19) precursor, splice form N;Alternate names: bone morphogenic protein splice form BMP-1/His
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Description: catalyzes hydrolysis of the carboxyl-terminal propeptide of collagen type C;Superfamily: procollagen C-endopeptidase; astacin homology; Clr/Cls repeat homology; EC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: GDB:125203; OMIM:112264
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:L35278;
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A; Residues: 703-823 <TAK>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        , Allernate names: bone morphogenic protein (Species: Homo sapiens (man)
                                                                                                                     Matches
                                                                                                                                          Query Match
Best Local
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                                                                                                               Similarity 9; Conserv
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                                                       YDYVEVRDG 187
                                                                                                                     Conservative
385
                                                                                                                                          1.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Celeste, A.J.; Mitsock, L.M.; Whitters, M.J.; Kriz,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NID:g619423; PIDN:AAC41703.1; PID:g619424
                                                                                                                     0
                                                                                                                                                 Score 9;
Pred. No.
                                                                                                                  Mismatches
                                                                                                                     DB - 1.4;
                                                                                                                     <u>..</u>
                                                                                                                                                                         Length 823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  form HIS #status predicted <MAT>
                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               duplication;
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EKRPALQPPRGRPHQLKFRVQKRNRTPQ'

Celeste, A.J.; Mitsock, L.M.; Whitters, M.J.; Kriz,

09-Jul-2004

form

and

activities

R.W.,

Hew

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F;130-321/Domain: astacin homology <AST>
F;130-431/Domain: Clr/Cls repeat homology <ClR1>
F;322-431/Domain: Clr/Cls repeat homology <ClR2>
F;435-544/Domain: Clr/Cls repeat homology <ClR2>
F;551-587/Domain: EGF homology <EG1>
F;551-700/Domain: EGF homology <EG2
F;707-742/Domain: EGF homology <EG2
F;707-742/Domain: Clr/Cls repeat homology <ClR4>
F;707-742/Domain: Clr/Cls repeat homology <ClR5>
F;707-742/Domain: Clr/Cls repeat homology <ClR5>
F;860-973/Domain: Clr/Cls repeat homology <ClR5>
F;961,42,332,363,599/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;163-319,185-205,322-348,375-397,435-461,488-510,551-563,559-572,574-587,591-617,6
F;213,217,223,272/Binding site: zinc (His, His, Tyr) #status predicted
F;214/Active site: Glu #status predicted
F;565,720/Modified site: erythro-beta-hydroxyasparagine (Asn) #status predicted
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Residues: I-991 <RES>
A;Cross-references: UNIPROT:P98063; GB:L24755; NID:g439606; PIDN:AAA37306.1; PID:g439607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Title: Embryonic expression of mouse bone morphogenetic A;Reference number: I49540; MUID:94229342; PMID:8174772 A;Accession: I49540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Fukagawa, M.; Noboru, S.; Hogan, B.L.M.; Jones, C.M.
Dev. Biol. 163, 175–183, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        procollagen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 703-986 <TAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Bone morphogenetic protein-1 and a mammalian tolloid homologue (mTld) are enco
A;Reference number: A58788; MUID:95096114; PMID:7798260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:P13497; GB:M22488; NID:g179499; PIDN:AAA51833.1; PID:g179500
R;Takahara, K.; Lyons, G.E.; Greenspan, D.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:L35279; NID:g619860; PIDN:AAC41710.1; PID:g619861
                                                                                                                                                                                                                                                                                Superfamily: procollagen C-endopeptidase; astacin Kaywords: hydrolase; metalloproteinase; zinc; 135-326/Domain: astacin homology <AST> 1556-592/Domain: EGF homology <EG1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;Description: catalyzes hydrolysis of the carboxyl-terminal propeptide of collagen type;Superfamily: procollagen C-endopeptidase; ascarin homology; Cir/Cis repeat homology; E;Superfamily: procollagen C-endopeptidase; ascarin homology; Cir/Cis repeat homology; E;Keywords: alternative splicing; beta-hydroxyasparagine; bone; calcium; duplication; gl;Keywords: alternative splicing; beta-hydroxyasparagine; bone; calcium; duplication; gl;Keywords: signal sequence #status predicted <SIG>
11-22/Domain: signal sequence #status predicted <SIG>
123-986/Product: procollagen C-endopeptidase tolloid-like splice form #status predicted
                                                                                                                                                                                             ,596-705/Domain: Clr/Cls repeat homology <CIR>,712-747/Domain: EGF homology <EG2>,228,277/Binding site: zinc (His, His,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                            ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rocollagen C-endopeptidase (EC 3.4.24.19) precursor, tolloid-like splice form ;Species: Mus musculus (house mouse) ;Species: O2-Jul-1996 #text_change 09-Jul-2004
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                                                                                                                                                                      219/Active site: Glu #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Accession: I49540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Function:
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                                                                                   Query Match
Best Local
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                                                           Matches
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Chem. 269, 32572-32578, 1994
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     179
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9; Conserv
                                                        Similarity
9; Conserv
  YDYVEVRDG 187
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                                                                                   1.2%;
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100.0%; Pred. No. 1.
ive 0; Mismatches
                                                                                   Score 9;
                                                        <u>,</u>
                                                        Mismatches
                                                                                   9; DB 2;
No. 1.7;
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5. 1.7;
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                                                                                                             Length 991;
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                                                                                                                                                                                                   Tyr) #status
                                                        Indels
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uevelopment 124, 3363-3374, 1997

A;Title: Identification and localization of a sea urchin Notch
A;Reference number: Z20966; MUID:97454256; PMID:9310331
A;Accession: T31070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Riftle: 141, A.L.; Xie, T.; Bossie, C.A.; Blackman, R.K.; Padgett, R.W. Genetics 141, 271-281, 1995
A;Title: The tolkin gene is a tolloid/BMP-1 homologue that is essential A;Reference number: S58984; MUID:96042912; PMID:8536976
A;Accession: S58984
                                                        C;Species: Homo sapiens (man)
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 23-Jul-1999
C;Accession: S00996
                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: mRNA
A;Residues: 1-2531 <SHE>
A;Cross-references: EMBL.AF000634; NID:g2570350; PID:g2570351; PIDN:AAB82088.1
C;Superfamily: notch protein; ankyrin repeat homology; EGF homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Accession: T31070
R;Sherwood, D.R.; McClay,
Development 124, 3363-337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;1118-1153/Domain: EGF homology <EGF1>
F;614,618,624,673/Binding site: zinc (His, His, His, Tyr) #status predicted
F;615/Active site: Glu #status predicted
                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Keywords: hydrolase; metalloproteinase; F;529-722/Domain: astacin homology <AST>F;958-993/Domain: EGF homology <EGF>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-1464 <FIN>
A; Cross-references: UNIPROT: Q24132; EMBL: U34777; NID: g1002985; PIDN: AAC47015.1; PID: g100
A; Note: the authors did not translate the codon for residue 722
                   R;Straubinger, B.; Thiebe, R.; Huber, C.;
Biol. Chem. Hoppe-Seyler 369, 601-607, 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated
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    A; Title: Two unusual human
                                                                                                                        Ig kappa chain precursor V
                                                                                                                                                800996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         notch homolog -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: FlyBase:FBgn0004885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         development protein tolkin (EC 3.4.24.-) - fruit fly (Drosophila melanogaster)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S58984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         otch homolog - sea urchin (Lytechinus variegatus)
;Species: Lytechinus variegatus (variegated urchin)
;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #
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;Date: 19-Jul-1996 #sequence_revision
                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                         CACLAGYTG
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                                                                                                                          region
immunoglobulin V-kappa genes
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; Pred. No
                                                                                                                                                                                                                                                                                                                  0
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    from GB/EMBL/DDBJ
                                                                                                                          (AlO) - human (fragment)
                                                                                                                                                                                                                                                                                                                red. No. 4;
Mismatches
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                                        Osterholzer, E.;
                                                                                                                                                                                                                                                                                                                                     DB 2;
o. 4;
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                                                                                                                                                                                                                                                                                                                                                       Length 2531;
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                                           Zachau,
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RESULT 11
G70323
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C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin C;Keywords: heterotetramer; immunoglobulin F;1-19/Domain: signal sequence #status predicted <SIG>F;20-114/Product: Ig kappa chain V region #status predicted F;20-114/Product: Tg kappa chain V region #status predicted F;20-114/Product: Tg kappa chain V region #status predicted F;20-114/Product: Tg kappa chain V region;
                                                                                                                                                                                                     thrombin (EC 3.4.21.5) B chain - chicken (fragment)
(;Species: Gallus gallus (chicken)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change
C;Accession: D42696
R;Banfield, D.K.; MacGillivray, R.T.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 2779-2783, 1992
A;Title: Partial characterization of vertabrate prothrombin cDNA
A;Reference number: A42696; MUID:92212913; PMID:1557383
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D42696
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A;Acession: G70323
                                                         A;Cross-references: UNIPROT:Q91001; GB:M81391
C;Superfamily: thrombin; Gla domain homology;
C;Keywords: hydrolase; serine proteinase
                                                                                                              A; Molecule type: mRNA
A; Residues: 1-235 <BAN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conserved hypothetical protein aq_260 - Aquifex aeolicus
C;Species: Aquifex aeolicus
C;Date: 08-May-1998 #sequence_revision 08-May-1998 #text_change 09-Jul-2004
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A;Accession: S00996
A;Molecule type: DNA
A;Residues: 1-114 <STR>
                                                                                                                                                                                  A; Reference number: A42696; A; Accession: D42696
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:066619; GB:AE000681; NID:g2982963; PIDN:AAC06588.1; PID:g298
A;Experimental source: strain VF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Genetics:
                                                                                                                                                            A; Status: preliminary
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o. 2.8;
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                                                                                homology; trypsin homology
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probable membrane protein dedD [imported] - Yersinia pestis (strain CO92) C;Species: Yersinia pestis
C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
C;Accession: AB0338
C;Accession: AB0338
R;Parkhill, J; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B. Geno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell,
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C;Superfamily: thrombin; Gla domain homology; kringle C;Keywords: hydrolase; serine proteinase F;1-227/Domain: trypsin homology; '---
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                                                                                                                                                                                                                                                  R;Banfield, D.K.; MacGillivray, R.T.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 2779-2783, 1992
A;Title: Partial characterization of vertebrate prothrombin A;Reference number: A42696; MUID:92212913; PMID:1557383
A;Accession: C42696
                                                                                                                                                                                 A;Status: preliminary; nucleic acid sequence not shown; A;Molecule type: mRNA A;Residues: 1-236 <BANA A;Residues: 1-236 <BANA A;Cross-references: UNIPROT:Q28731; GB:M81396
                                                                                                                                                                                                                                                                                                                                      thrombin (BC 3.4.21.5) B chain - rabbit (fragment) c;Species: Oryctolagus cuniculus (domestic rabbit) C;Date: 26-May-1994 #sequence_revision 26-May-1994 C;Accession: C42696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:Q90244; GB:MG
C;Superfamily: thrombin; Gla domain homol
C;Keywords: hydrolase; serine proteinase
F;1-226/Domain: trypsin homology (fragmer
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tive 0;
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100.0%; Pred. No. 5.
tive 0; Mismatches
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0; Mismatches
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Nature 413, 523-527, 2001
A;Tatle: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
A;Reference number: AB00001; MUID:21470413; PMID:11586360
A;Accession: AB0338
A;Status: preliminary
A;Molecule type: DNA
A;Residuse: 1-240 < KUR>
A;Cross-references: UNIPROT:Q8ZD23; GB:AL590842; PIDN:CAC93009.1; PID:g15980748; GSPDB:GC;Genetics:
A;Genetics: GedD
C;Genetics: A;GenetidedD protein
C;Genetics: 1.1%; Score 8; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 5.5;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 8; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Db 212 SKQKLQSA 387
Db 212 SKQKLQSA 219
Search completed: July 12, 2005, 17:23:21
Job time: 63 8ecs
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Result
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DORNAMES = UNQ659; Homo sapiens (Human).  ELGC699. Homo sapiens (Human).  ENARYOTA; Metazoa; Chordata; Craniata; Vertebrata; Entels Mammalia; Entheria; Primates; Catarrhini; Hominidae; Homo. NCBI TaxID=9606;  SEQUENCE FROM N.A.  MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003; Clark H.F., Garney A.L., Abaya E., Baker K., Baldwin D., E Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel E Bacon D., Foster J., Grinaldi C., Gu Q., Hass P.E., Helder Huang A., Kim H.S., Klimwski L., Jin Y., Johnson S., Lee Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoent Seehagiri S., Simmons L., Singh J., Smith V., Stinson J., Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.H., Ye Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Woo Godowaki P.;  Fine secreted protein discovery initiative (SPDI), a large effort to identify novel human secreted and transmembrane bioinformatics assessment."  Genome Res. 13:2265-2270(2003)1- SIMILARITY: Belongs to peptidase family S11- SIMILARITY: Contains 1 EGF-like domain.  EMEL; AY358346; AAQ88712.1;1- SIMILARITY: Contains 1 EGF-like domain.  EMG.; GO:0004263; F:ctypsin activity; IEA. GO; GO:000426; GO; GO; GO; G	Q6UXH9; 05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27,	SULT 1 UXH9 Q6UXH9 PRELIMINARY; PRT; 720		492 6 0.8 123 2 Q7VUW2 493 6 0.8 123 2 Q7W3Z5 494 6 0.8 123 2 Q7WFC7 495 6 0.8 123 2 Q81T77 496 6 0.8 123 2 Q81T97 497 6 0.8 123 2 Q6D798 497 6 0.8 123 2 Q6D798 498 6 0.8 123 2 Q6HCG2 499 6 0.8 124 1 VNS1_IATKR 500 6 0.8 124 2 Q8ZYT1
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Name=DKRZp668N24154;
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Query Match
Best Local S
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The German cDNA Consortium;
The German cDNA Consortium;
Kochrer K., Beyer A., Mewes H.W., Weil B., Amid (Pobo G., Han M., Wiemann S.;
Submitted (SEP-2004) to the EMBL/GenBank/DDBJ dat -!- SIMILARITY: Belongs to peptidase family S1.
-!- SIMILARITY: Contains 1 EGF-like domain.
EMBL; BX640676; CAE45808.1; -.
EMBL; BX640
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InterPro; IPR006210; IEGE_Like.
InterPro; IPR001254; Peptidase_S1.
InterPro; IPR001214; Peptidase_S1A.
InterPro; IPR001314; Peptidase_S1A.
InterPro; IPR009003; Pept_Ser_Cys.
InterPro; IPR009045; Sushi_SCR_CCP.
Pfam; PF00431; CUB; 1.
Pfam; PF00431; CUB; 1.
Pfam; PF00431; CUB; 1.
Pfam; PF00032; CCP; 2.
SMART; SM00032; CCP; 2.
SMART; SM00042; CUB; 1.
SMART; SM001042; CUB; 1.
SMART; SM001049; EGF_CA; 1.
SMART; SM001079; EGF_CA; 1.
SMART; SM001079; EGF_CA; 1.
SMART; SM001180; CUB; 1.
PROSITE; PS001180; CUB; 1.
PROSITE; PS01180; EGF_2; 1.
PROSITE; PS01180; EGF_2; 1.
PROSITE; PS01180; EGF_3; 1.
PROSITE; PS01240; TRYPSIN_DOM; 1.
EGF-like dommain; Hydrolase; Hypothetical processors.
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Serine protease.
SEQUENCE 720 A
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                                                                                                                                                                                                                                                                                                            YVEVRDGDNRDGQIIKRVCGNERPAPIQSIGSSLHVLFHSDGSKNFDGFHAIYEEITACS
                                                                                                                                                                                                                                                                                                                                                                                                                       YGGDCMRCGQVLRAPKGQILLESYPLNAHCEWTIHAKPGFVIQLRFVMLSLEFDYMCQYD
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PMQVQSRETPLHQLYSAAFSKQKLQSAPTKKPALPFGDLPMGYQHLHTQLQYECISPFYR
                                                                                    NGRHAKIGTYVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVL
                                                                                                                       NGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGEWSGKQPICIKACREPKISDLVRRRVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MELGCWTQLGLTFLQLLLISSLPREYTVINEACPGAEWNIMCRECCEYDQI
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nilarity 99.8%;
Conservative
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; Pred. No. 0;
0; Mismatches
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peptidolysis;
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RC TISSUEPPlacenta;
RC PubWed=14702039, DOI=10.1038/ng1285;
RA Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
RA Ota T., Suzuki Y., Nishikawa T., Otsuki T., Simura K., Makite H.,
RA Yamamoto J., Salto K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J., Salto K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J., Salto K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Yamamoto J., Salto K., Kawai Y., Isono Y., Nakamura Y., Nagahari K.,
RA Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M.,
RA Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y.,
RA Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y.,
RA Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S.,
RA Tanai H., Kimata M., Watanabe S., Yosida M., Hotuta T., Kusano J.,
RA Kanehori K., Takahashi-Fujii A., Hara H., Tanase T., Nomura Y.,
RA Togiya S., Komdi F., Hara R., Takeuchi K., Arita M., Imose N.,
RA Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S.,
RA Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA Makagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H.,
RA Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B.,
RA Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
RA Pujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
RA Kawabata A., Hikiji T., Noguchi S., Itoh T., Shigeta K., Senba T.,
RA Matsumura K., Nagase T., Nomura N., Kikuchi H., Masaho Y., Vamashita R.,
RA Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K.,
RA Nakajahi T., Noguchi T., Shirai Y., Makagawa K.,
RA Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;
RT CDNAg. ".
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01-DEC-2001 (TrEMBLrel. 15, Last sequence update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
01-WAR-2004 (TrEMBLrel. 26, Last annotation update)
Hypothetical protein FLJ14935.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI TaxID-9606;
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096JW2;
01-DEC-2001
01-DEC-2001
01-MAR-2004
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Genet. 36:4
SIMILARITY:
SIMILARITY:
SIMILARITY:
BL; AK027841;
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                                                           36:40-45 (2004) .
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: Contains 1 E
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                   peptidase
EGF-like d
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RESULT Q71RE9

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Q71RE9; Q71RE9; 05-JUL-2004

(TrEMBLrel. 27, PRELIMINARY;

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R GO; GO:0004295; F:Chymotrypsin activity; IEA.
R GO; GO:0006208; P:Cotecolysis and peptidolysis; IEA.
R GO; GO:0006508; P:protecolysis and peptidolysis; IEA.
R InterPro; IPR000859; CUB.
R InterPro; IPR0006209; EGF_1lke.
R InterPro; IPR006209; EGF_1lke.
R InterPro; IPR001314; Peptidase_S1A.
R InterPro; IPR001314; Peptidase_S1A.
R InterPro; IPR00031; Peptidase_S1A.
R InterPro; IPR00031; Peptidase_S1A.
R InterPro; IPR00031; CUB; 1.
R InterPro; IPR00031; CUB; 1.
R Pfam; PF00031; CUB; 1.
R Pfam; PF000084; Sushi_SCR_CCP.
R FART; SM0004; Sushi_1.
R Pfam; PF000084; Sushi_1.
R Pfam; PF000089; Trypsin; 1.
R Pfam; PF000089; Trypsin; 1.
R PRINTS; SM00012; CUB; 1.
R PROSITE; SM00012; EGF_1; 1.
R PROSITE; PS01186; EGF_2; 1.
R PROSITE; PS01186; EGF_2; 1.
R PROSITE; PS01186; EGF_3; 1.
R PROSITE; PS01186; EGF_3; 1.
R PROSITE; PS0126; EGF_3; 1.
R PROSITE; PS0126; EGF_3; 1.
R PROSITE; PS0126; EGF_3; 1.
R PROSITE; PS0226; EGF_3; 1.
R PROSITE; PS0226; TRYPSIN DOM; 1.
R PROSITE; PS0226; TRYPSIN DOM; 1.
R PROSITE; PS02240; TRYPSIN DOM; 1.
R PROSITE; PS02240; TRYPSIN DOM; 1.
R PGF-like domain; Hydrolase; Protease; Serine protease.
SEQUENCE 737 AA; 81952 MW; 4F51689C5EB32B44 CRC64;
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Best Local Similarity
Matches 446; Conserv
                         695
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                                                                                                                                                                                                                                                                                                                                                                                 LEERNCSDPGGPVNGYQKITGGPGLINGRHAKIGTVVSFFCNNSYVLSGNEKRTCQQNGE
                                                                                                                       RVQPICLAASRDLSTSFQESHITVAGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQH
                                                                                                                                                                                                                  PKTQGLRWPWQAAIYRRTSGVHÖGSLHKGAWFLVCSGALVNERTVVVAAHCVTDLGKVTM
                                                                                                                                                                                                                                                                                         PFGDLPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITA
                                                                                                                                                                                                                                                                                                                          KTCSHRLSTAFTKVLPFKDWIERNMK
               KTCSHRLSTAFTKVLPFKDWIERNMK
                                                    EDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFPGRASPEPRWHLMGLVSWSYD
                                                                  EDHGIPVSVTDNMFCASWEPTAPSDICTAETGGIAAVSFBGRASPEPRWHLMGLVSWSYD
                                                                                                        RVQPICLAASRDLSTSFQESHITVAGWNVLADVRSPGFKNDTLRSGVVSVVDSLLCEEQH
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Pred. No.
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Euteleostomi;

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Land Lee (APR-2001) to the EMBL/GenBank/DDBJ databases.

-i- SIMILARITY: Belongs to peptidase family S1.

DR EMBL; AF370388; AAQ15224.1; -.

DR HSSP; P00734; 1BB0.

DR GO; GO:00004263; F:chymotrypsin ~~

R GO; GO:00004295. --

R GO; GO:00004295. --
RESULT
Q9Y432
ID Q9
AC Q
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InterPro; IPR00314; Peptidase_S1A.
InterPro; IPR003031 peptidase_S1A.
InterPro; IPR009003; Sushi_SCR_CCP.
INTERPRO; IPR000436; Sushi_SCR_CCP.
PRINTS; PR00722; CHYMOTRYPSIN.
SMART; SM00020; Tryp_SPc; 1.
PROSITE; PS50923; SUSHI; 1.
PROSITE; PS50923; SUSHI; 1.
Hydrolase; Protease; Serine protease.
SEQUENCE 417 AA; 46703 MW; 2546A52
                                                                Q9Y432
Q9Y432;
01-NOV-1999 (TrEMBLrel. 1
01-NOV-1999 (TrEMBLrel. 1
01-MAR-2004 (TrEMBLrel. 2
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Mammalia; Eutheria; Primates;
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    Homo
                         Hypothetical protein DKFZp586H2123 Name=DKFZp586H2123;
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Pred. No.
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Catarrhini; Hominidae;
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Best Local Similarity
Matches 178; Conserv
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GO; GO:0008233; F:peptidase activity; IEA.

GO; GO:0004295; F:trypsin activity; IEA.

GO; GO:0006508; F:proteolysis and peptidolysis; IE.

InterPro; IPR001254; Peptidase S1.

InterPro; IPR00903; Pept_Ser_Cys.

IPR009003; Pept_Ser_Cys.

IPR00909; Trypsin; 1.

SMART; SM00020; Tryps: 1.

PROSITE; PS50240; TRYPSIN DOM; 1.
                                                                                                                                                                                                                                                                                                                                                                                   Q8BU25;
Q8BU25;
01-MAR-2003
                                                                                                                                                                                                                                                                                        01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 25, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mus musculus 2 days neonate thymus thymic cells cDNA, RIKEN full
length enriched library, clone: B430002G05 product: hypothetical E
like domain, CUB domain, Sushi domain / SCR repeat / CCP module
serine proteases, trypsin family domain containing protein, full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ansorge W., Wirkner U., Mewes H.W., Gassenhuber J., Wiem Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases. EMBL; AL050214; CABB43317.1; -. PIR; T08805; T08805.
                                                                                                                        STRAIN=NOD; TISSUE-Thymus;
MEDLINE=99279233; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P. Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN=NOD; TISSUE=Thymus;
                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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Nature 409:685-690(2001)
                                       MEDLINE=21085660; PubMed RIKEN FANTOM Consortium;
                                                                                                                Meth.
                                                                                                                                                                                                                                                         Mus musculus (Mouse)
                                                                                                                                                                                                                                                                      Name=E430002G05Rik;
                          "Functional annotation of a
                                                                     STRAIN=NOD;
                                                                                    SEQUENCE
                                                                                                                                                                                                              NCBI_TaxID=10090;
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                                                                FROM N.A.
DD; TISSUE=Thymus;
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, Wirkner U., r
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                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                303:19-44 (1999)
                                                      PubMed=11217851; DOI=10.1038/35055500
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Primates;
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                            full-length
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Pred. No. 2.5e-1
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Catarrhini; Hominidae;
                                                                                                                                                                                                                           Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABC793BE8682D439
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                                                                                                                                                                                                                                                                                                                                                                                                                  720
                             mouse cDNA collection.";
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Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W.,
A Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
A Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Kurihara C., Matsuyama T., Miyazaki A., Konno H., Kouda M., Koya S.,
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A Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,
A Saito R., Saltoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,
A Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
A Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
L Submitted (ApR-2002) to the EMBL/GenBank/DDBJ databases.
C -!- SIMILARITY: Contains 1 EGF-like domain.
Pfam; PF00084; Sushi; 1.
Pfam; PF00089; Trypsin; 1.
PRINTS; PR00722; CHYMOTRYPSIN.
SMART; SM00032; CCP; 2.
SMART; SM00042; CUB; 1.
SMART; SM000181; EGF; 2.
SMART; SM000181; Tryp_SPC; 1.
PROSITE; PS01180; CUB; 1.
PROSITE; PS01186; EGF 1; 1.
PROSITE; PS00022; EGF 1; 1.
PROSITE; PS00023; EGF 3; 1.
PROSITE; PS00026; EGF 3; 1.
PROSITE; PS00026; EGF 3; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000859; CINTERPRO; IPR000742; INTERPRO; IPR006209; INTERPRO; IPR006210; INTERPRO; IPR001254; FINTERPRO; IPR001354; FINTERPRO; IPR0010003; INTERPRO; IPR000003; INTERPRO; IPR0000436; SINTERPRO; IPR0004436; SINTERPRO; IPR0004446; IPR000446; IPR0004446; IPR000446; IPR000446; IPR000446; IPR000446; IPR000446; IPR000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FANTOM Consortium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MGI:2445082;
                                                                                                                                                                                                                                                                                                                                                                        PF000431; CUB; 1.
PF00008; EGF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P00736; 1GPZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE=Thymus;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BAC40098.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C:extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E430002G05Rik.
                                                                                                                                                                                                                                                                                                                                                                                                                          ; Peptidase_S1.
; Peptidase_S1A.
; Pept_Ser_Cys.
; Sushi_SCR_CCP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EGF 2.
EGF 11ke.
IEGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           space;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RC STRAIN-CZECH I; TISSUB-Mammary tumor;

RM MEDLINE-CZECH I; TISSUB-Mammary tumor;

RM MEDLINE-CZECH I; TISSUB-Mammary tumor;

RM Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G.,

RM KLausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RM Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

RA Liatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Liatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M.J., Usdin T. B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T. B., Toshiyuki S., Carninci P., Prange C.,

RA Barwata S., Mocquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S., McDuellano N.A., Peters G.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Schein J.E.,

RA Rodriguez A.C., Shelbaka U., Smailus D.E., Schnerch A., Schein J.E.,

RA Rodriguez A.C., Shelbaka U., Smailus D.E., Schnerch A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                       EMBL; BC031841; AAH31841.1; -.
EMBL; BC057685; AAH57685.1; -.
HSSP; P00736; 1GPZ.
MGD; MGI:2445082; E430002G05Rik.
GO: GO:0005615; C:extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8K2B8;
01-OCT-2002 (TrEMBLrel.
01-OCT-2002 (TrEMBLrel.
25-OCT-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS50240; TRYPSIN DOM; 1.
EGF-like domain; Hydrolase; Hypothetical protein;
Serine protease.
SEQUENCE 720 AA; 80300 MW; C098E076D903A5A0 CF
                                                                                                                                                                                                                                              Strausberg
                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=CZECH
Strausberg R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jones S.J., Marra M.A.;
"Generation and initial analysis and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regeneration associated
                                                                                                                                                                                                                          Submitted
                                                                                                                                                                                                                                                                             STRAIN-CZECH
                                                                                                                                                                                                                                                                                                                                                         Submitted (JUN-2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=E430002G05Rik;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q8K2B8
                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                           -!- SIMILARITY:
                         InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                            GO:0005615; C:ex
erPro; IPR000859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                           FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NECDSCLIHPGCTIFENCKSCRNGSWGGTLDDFYVKGFYCAECRAGWYGGDCMRCGQVLR
                                                                                                                                                                                                                       (SEP-2003) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Acad.
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                                                                                                                                                                                                                                                                       ; II;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                            II;
                                                                                                                               Belongs to peptidase AAH31841.1; -. AAH57685.1; -.
                                                                                                                                                                                                                                                                          TISSUE=Mammary tumor
                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Mammary tumor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chordata;
Rodentia;
EGF_2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A.
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                                                                                                                                                                                                                                                                                                                                                         the
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Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                         EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99:16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protease
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                                                        space;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    more
                                                                                                                                                                                             family S1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.6e-55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
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                                                                                                                                                                                                                                                                                                                                                               databases
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X Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Klausner R.D., Collins F.S., Wagner L.H., Shenmen C.M., Schuler G.D.,

X Klausner R.D., Collins F.S., Wagner L.H., Shenmen C.M., Schuler G.D.,

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X Hopkins S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

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X Hilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

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X Hillalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

X Halley J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

X Halley J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

X Halley J., Helton E., Scheman M., Schemtz J., Myers R.M., Butterfield Y.S.,

X Hopkinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.B.,

X Jones S.J., Marra M.A.;

X Hopkinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.B.,

X Hopkinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.B.,
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Best Local
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Pfam; PF00008; EGF; 1.

Pfam; PF00084; Sushi; 1.

Pfam; PF00089; Trypsin; 1.

PRINTS; PR00722; CHYMOTRYPSIN.

PROSITE; PS01186; EGF 1; 1.

PROSITE; PS00022; EGF 1; 1.

PROSITE; PS50026; EGF 3; 1.

PROSITE; PS50923; SUSHI; 2.

PROSITE; PS50923; SUSHI; 2.

PROSITE; PS509240; TRYPSIN_DOM; 1.

PROSITE; PS509240; TRYPSIN_DOM; 1.
Q6DIV5;
25-OCT-2004 (TrEMBLrel.
25-OCT-2004 (TrEMBLrel.
25-OCT-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR006209; EGF like.
InterPro; IPR001154; Peptidase_S1.
InterPro; IPR0011314; Peptidase_S1.
InterPro; IPR009003; Pept_Ser_Cys.
InterPro; IPR000436; Sushi_SCR_CCF
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGC89196 protein.
Name=MGC89196;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopodinae;
                                                                                                                                                                                                                                                 "Generation and initial analysis and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:
                                                                                                                                                                                              EQUENCE FROM N.A.
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; Pept_Ser_Cys.
; Sushi_SCR_CCP.
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Last sequence update)
Last annotation updat
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                                                                                                                                                                                                                                                        99:16899-16903 (2002)
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4.2e-34
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1 J.E.,
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DR Pfam; PF000431; CUB; 1.

DR Pfam; PF00008; EGF; 1.

DR Pfam; PF00084; Sushi; 2.

DR SMART; SM000042; CCCP; 2.

DR SMART; SM000042; CUB; 1.

DR SMART; SM00179; EGF CA; 1.

DR SMART; SM00179; EGF CA; 1.

DR SMART; SM00179; EGF CA; 1.

PROSITE; PS01180; CUB; 1.

R PROSITE; PS01180; CUB; 1.

R PROSITE; PS01180; GGF 2; 1.

PROSITE; PS01180; TYP, SPC; 1.

PROSITE; PS50240; TRYPSIN_DOM; 1.

EGF-11ke domain; Hydrolase; Protee SEQUENCE 722 AA; 80366 MW:
                                                                                                                                RESULT PRESULT OF SELECTION OF 
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Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q91WZ0;
Q91WZO;
01-DEC-2001
01-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GO; GO:000
GO; GO:000
GO; GO:000
InterPro;
                                                                                                                                NON_TER
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                           STRAIN-Wistar; TISSUE-E18 whole embryo;
Kataoka H., Enomoto K.;
Kubmitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AB073100; BBB69961.1; -.
HSSP; Q9UCV4; 1NZI.
GO; GO:0008533; F:astacin activity; IBA.
GO; GO:0008538; P:proteolysis and peptidolysis; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                      Pfam; PF01400; Astacin; 1. Pfam; PF00431; CUB; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bone morphogenetic
                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Name=Bmp-1;
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; GO:0004295;
; GO:0006508;
    179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24;
                                          h 1.2%; Score 9; Similarity 100.0%; Pred. No. 9; Conservative 0; Mismatc
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YDYVEVRDG
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222 /
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F:trypsin activity; IEA
P:proteolysis and peption
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                                                                                                                                   222
25426 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein 1 (Fragment).
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80366 MW; F173563206D1AE82 CRC64;
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; Pept_Ser_Cys.
; Sushi_SCR_CCP.
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EGF_Ca.
EGF_like.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                     F6A9052DA98BB57A CRC64;
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1836/L
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O67008;
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16-OCT-2001
25-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                 O86553; PRELIMINARY;
086553;
01-NOV-1998 (TrEMBLrel. 08,
01-NOV-1998 (TrEMBLrel. 26,
01-MAR-2004 (TrEMBLrel. 26,
SEQUENCE FROM N.A.
STRAINA3(2) / M145;
MEDLINE=21996410; PubMed=12000953; DOI=10.1038/417141a;
Bentley S.D., Chater K.F., Cerdeno-Tarraga A.-M., Challis
Thomson N.R., James K.D., Harris D.E., Quail M.A., Kieser
                                                                                                                                                                                                                                                 Streptomyces coelicolor.
Bacteria; Actinobacteria; Actinobactsteria; Actinobacteria; Actinobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRANSMEM TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-OCT-2001 (Rel. 40, Last sequence up
25-OCT-2004 (Rel. 45, Last annotation
Hypothetical protein AQ 836.
OrderedLocusNames=AQ_836;
                                                                                                                                                                                                                                                                                                                                                                   Putative dehydrogenase.
ORFNames=SC1F2.16C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Complete proteome; Hypothetical protein; TRANSMEM 4 24 Potential.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aquifex aeolicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E70372;
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9; Conserv
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145
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62
120
165
191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.2%; Score 9;
100.0%; Pred. No.
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                                                                                                                                                                                                                                                     Actinobacteridae; Actinomycetales; ycetaceae; Streptomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
Last sequence that annotes the contract of the contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B934B56FEA35B183 CRC64;
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RESULT
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                                                           RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Altschul S.F., Zeeberg.B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg.B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg.B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., WcKernan K.J., Malek J.A., Gunaratne P.H.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
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Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TLL2 protein (Fragment).
Name=TLL2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q6PJN5
Q6PJN5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PRO0081; GDHRDH.
PRINTS; PR00080; SDRFAMILY.
PROSITE; PS00061; ADH SHORT; 1.
Complete proteome; Oxidoreductase
SEQUENCE 276 AA; 29010 MW; 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AL939128; CAA20507.1; -. 
PIR; T29125; T29125. 
HSSP; P08074; 1CVD. 
GO; GO:0016491; F:oxidoreductase 
GO; GO:0008122; P:metabolism; IEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Harper D., Bateman A., Brown S., Chandra G., Chen C.W., Collins M., Cronin A., Fraser A., Goble A., Hidalgo J., Hornsby T., Howarth S., Huang C.-H., Kieser T., Larke L., Murphy L.D., Oliver K., O'Neil S., Rabbinowitsch E., Rajandream M.A., Rutherford K.M., Rutter S., Seeger K., Saunders D., Sharp S., Squares R., Squares S., Taylor K., Seeger T., Wietzorrek A., Woodward J.R., Barrell B.G., Parkhill J., Woodward T., Wietzorrek A., Woodward J.R., Barrell B.G., Parkhill J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hopwood D.A.;
"Complete genome sequence of the model actinomycete Streptomyces coelicolor A3(2).";
"Coelicolor A1(1/1/2002)
               and mouse cDNA sequences.
Proc. Natl. Acad. Sci. U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-JUL-2004
05-JUL-2004
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InterPro; IPR002347; Adh_short_C2.
Pfam; PP00106; adh_short; 1.
                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=22388257; PubMed=12477932;
                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Ovary;
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                "Generation and initial analysis of more than 15,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SIMILARITY: Belongs to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SDR) family.
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9; Conserv
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, Fraser A., Gob
vieser T.,
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Primates;
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
               99:16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30F0038B70D63C7C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short-chain dehydrogenases/reductases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                activity; IEA.
                                                                                                                                                                                                                                                                                                                                                                                      DOI=10.1073/pnas.242603899;
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Best Local
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P98069;
01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Bone morphogenetic protein 1 homolog precursor (EC 3.4.24.-) (SUBMP).
Strongylocentrotus purpuratus (Purple sea urchin).

Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
Echinoidea, Euechinoidea; Echinacea; Echinoida; Strongylocentrotidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GO; GG
GO; GG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PRO0480; ASTACIN.
SMART; SM00042; CUB; 2.
SMART; SM00042; CUB; 2.
PROSITE; PS00180; CUB; 2.
PROSITE; PS00142; ZINC_PROTEASE; UNKNOWN_1.
NON_TER 593 AA; 66353 MW; D7483E48E826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GO; GO:0008533; F:astacin activity; IEA.
GO; GO:0008533; F:metallopeptidase activity; IEA.
GO; GO:0008508; F:metallopeptidase activity; IEA.
GO; GO:0006508; P:proteolysis and peptidolysis; IEA.
InterPro; IPR000859; CUB.
InterPro; IPR006026; Peptidase_M.
InterPro; IPR006026; Peptidase_M12A.
InterPro; IPR006025; Peptidase_M12A.
InterPro; IPR006025; Peptidase_M2A.
Pfam; PF01400; Astacin; 1.
Pfam; PF00431; CUB; 2.
                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases. EMBL; BC013871; AAH13871.1; -
                                           EMBL; L23838;
HSSP; P35555;
                                                                                                                                                                                                                                                                                                            Devel
                                                                                                                                                                                                                                                                                                                  Hwang S.P.L., Partin J.S., Lennarz W.J.;
"Characterization of a homolog of human bone morphogenetic protin the embryo of the sea urchin, Strongylocentrotus purpuratus
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                             Strongylocentrotus.
NCBI_TaxID=7668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRPU
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                              MEROPS; M12.005;
                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=94215496; PubMed=8162855;
              InterPro;
                                                                                                                                                                                    hatched blastula.

DEVELOPMENTAL STAGE: Embryo; highest level before SIMILARITY: Belongs to the peptidase M12A family. SIMILARITY: Contains 2 CUB domains.

SIMILARITY: Contains 1 EGF-like domain.
                                                                                                                                                                                                                                                                                         elopment 120:559-568(1994). TISSUE SPECIFICITY: Ectodermal and primary mesenchym cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  406
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YDYVEVRDG
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IPR000152; Asx hydroxyl_S.
IPR000859; CUB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                              1EMN.
                                                         AAA30081.1;
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Pred. No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                              spiculogenesis
                                                                                                                                                                                                                                                                                                                          protein atus.";
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R Pfam; PF01401; Astacin; 1.

R Pfam; PF00431; CUB; 2.

R Pfam; PF00008; EGF; 1.

R PFAM; PF00008; EGF; 1.

R SMART; SM00042; CUB; 2.

R SMART; SM00179; EGF CA; 1.

R SMART; SM00179; EGF CA; 1.

R SMART; SM00123; ZnMC; 1.

R PROSITE; PS00101; ASX HYDROXYL; 1.

DR PROSITE; PS01180; CUB; 2.

DR PROSITE; PS01180; CUB; 2.

DR PROSITE; PS00022; EGF 1; FALSE NEG.

PROSITE; PS00026; EGF 3; 1.

DR PROSITE; PS01187; EGF CA; 1.

DR Calcium; Developmental protein; EGF-like domain; Emb

KW Calcium; Developmental Protein; EGF-like domain; Emb
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SEQUENCE
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METAL
ACT_SITE
METAL
          Walle-pur.;
Gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Aven: Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                       057658
057658;
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DOMAIN
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InterPro; IPR001881; EGF_Ca.
InterPro; IPR006209; EGF_like.
InterPro; IPR006025; Pept M_Zn_BS.
InterPro; IPR006026; Peptidase_M.
InterPro; IPR001506; Peptidase_M.
InterPro; IPR001506; Peptidase_M12A.
                                                                                                                                                                                                                                                                                   01-JUN-1998 (TrEMBLrel. 06, Created)
01-JUN-1998 (TrEMBLrel. 06, Last sequence update)
01-JUR-1998 (TrEMBLrel. 26, Last annotation update)
Bone morphogenetic protein 1 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
                                                                                                                                                                                                                                                                    Name=BMP1
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                                                                                                                                                        NCBI_TaxID=9031;
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248:233-243 (2000)
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9; Conserv
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639
                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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                                                                             PubMed=10806368; DOI=10.1016/S0378-1119(00)00114-1; ang D., Puzas J.E., O'Keefe R.J., Rosier R.N.,
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71893
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CUB 1.
CUB 2.
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alytic) (By similarity).
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similarity).
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Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

Klausner R.D., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Kallschenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Kallschenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Kallschenko L., Marusina N.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raha S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Vallalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Vallalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Vallakon E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Na Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
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Best Local
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Nus musculus (Mouse).
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Cr
Eukaryota; Metazoa; Rodentia; Sr
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SMART; SM00042; CUB; 3.

SMART; SM00179; EGF_CA; 1.

SMART; SM00179; EGF_CA; 1.

SMART; SM00235; ZMMG; 1.

PROSITE; PS00100; ASX_HYDROXYL; 1.

PROSITE; PS01180; CUB; 3.

PROSITE; PS01180; EGF_2; 1.

PROSITE; PS01187; EGF_CA; 1.

PROSITE; PS01187; EGF_CA; 1.
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06P550; PRELIMINARY;
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
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         whiting M., Madan A.,
Blakesley R.W., Touch
                                                                                                                                                                                                                                    MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                     STRAIN=C57BL/6; TISSUE=Mouse;
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                                                                                                                                                                                                                                                                                                                                                                              Bmp1 protein
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Similarity 100.0%; Pred. No. 9; Conservative
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Last annotation update)
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PROSITE; PS00010; AU
PROSITE; PS01180; CT
PROSITE; PS01186; EG
PROSITE; PS0026; EG
PROSITE; PS00187; EJ
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                                                                             **P07645; BG.
.$; PR07645; AS1.
.$; PR076480; AS1.
.$T; SM00042; CUB; 5.
.**ART; SM00181; EGF; 2.
.**MART; SM00179; EGF CA; 2.
.**OSITE; PS00110; ASX HYDROXYL; 2.
.**TE; PS01186; EGF 2; 2.
.**7026; EGF 3; 1.
.**7; EGF CA; 2.
                                                                                             EGF-
                                                                                                                                                                                                                                                            GO; GO:0004222; F:metalloendopeptidase InterPro; IPR000152; Asx hydroxyl_S. InterPro; IPR000155; CBS. InterPro; IPR000742; EGF_2. InterPro; IPR001881; EGF_G. InterPro; IPR001881; EGF_G. InterPro; IPR005209; EGF_like. InterPro; IPR006210; IEGF_I
                                                                                                                                                                                            PRINTS;
                                                                                                                                                                                                                  Pfam;
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Submitted (DEC
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"Generation and initial analysis and mouse cDNA sequences.";
                                                                                                                                                                         SMART;
                                                                                                                                                                                  SMART;
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                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=C57BL/6;
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                                                                                                                                                                                          n; PF01400; Astacin; 1.
n; PF00431; CUB; 5.
n; PF00008; EGF; 1.
n; PF07645; EGF CA; 1.
TTS; PR00480; ASTACIN.
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     187
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                                                 1.2%;
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k; Pred. No. 8.2
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Search completed: July 12, 2005, 17:26:40
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YDYVEVRDG

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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

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5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfIles1.pep:*
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US-09-341-046-20
US-09-438-048-2
US-09-850-048-2
US-09-85-385C-19
US-09-949-016-6690
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US-09-189-30-342
US-09-188-930-342
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US-09-287-368-4
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0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
1013	1013	1013	1013	1013	1012	1006	1006	1006	998	. 996	996	995
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US-09-612-402B-16	US-09-612-402B-15	US-09-240-473-3	US-09-021-287-3	US-08-866-650-3	US-09-612-402B-2	US-09-598-419-190	US-09-620-412C-190	US-09-556-877-190	US-10-101-464A-914	US-10-101-464A-933	US-10-101-464A-889	. US-08-747-562-15
16	15	Sequence 3, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 2, Appli	Sequence 190, App	Sequence 190, App	Seguence 190, App	Sequence 914, App	Sequence 933, App	Sequence 889, App	Sequence 15, Appl
	6 0.8 1013 4 US-09-612-402B-16 Sequence 16	6 0.8 1013 4 US-09-612-402B-15 6 0.8 1013 4 US-09-612-402B-16	6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 15 Sequence 16 0.8 1013 4 US-09-612-402B-16 Sequence 16	6 0.8 1013 2 US-09-021-287-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 15 6 0.8 1013 4 US-09-612-402B-15 Sequence 16 6 0.8 1013 4 US-09-612-402B-16 Sequence 16	6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-21-287-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 16 0.8 1013 4 US-09-612-402B-16 Sequence 16	6 0.8 1012 4 US-09-612-402B-2 Sequence 2, 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-021-287-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 15 6 0.8 1013 4 US-09-612-402B-16 Sequence 16	6 0.8 1006 4 US-09-598-419-190 Sequence 19 6 0.8 1012 4 US-09-612-402B-15 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-021-287-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 15	6 0.8 1006 4 US-09-520-412C-190 Sequence 19 6 0.8 1006 4 US-09-598-419-190 Sequence 19 6 0.8 1012 4 US-09-612-402B-2 Sequence 2, 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-021-287-3 Sequence 3, 6 0.8 1013 2 US-09-021-287-3 Sequence 3, 6 0.8 1013 3 US-09-612-402B-15 Sequence 3, 6 0.8 1013 4 US-09-612-402B-16 Sequence 15	6 0.8 1006 4 US-09-556-877-190 Sequence 19 6 0.8 1006 4 US-09-5020-412C-190 Sequence 19 6 0.8 1006 4 US-09-598-419-190 Sequence 19 6 0.8 1012 4 US-09-612-402B-2 Sequence 2, 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-21-287-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 15	6 0.8 998 4 US-10-101-464A-914 Sequence 91 6 0.8 1006 4 US-09-556-877-190 Sequence 19 6 0.8 1006 4 US-09-520-412C-190 Sequence 19 6 0.8 1006 4 US-09-520-412C-190 Sequence 19 6 0.8 1010 4 US-09-512-402B-15 Sequence 2, 6 0.8 1012 4 US-09-612-402B-15 Sequence 3, 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-201-287-3 Sequence 3, 6 0.8 1013 3 US-09-212-402B-15 Sequence 3, 6 0.8 1013 4 US-09-612-402B-15 Sequence 15	6 0.8 996 4 US-10-101-464A-933 Sequence 93 6 0.8 998 4 US-10-101-464A-933 Sequence 93 6 0.8 1006 4 US-09-556-8977-190 Sequence 19 6 0.8 1006 4 US-09-520-412C-190 Sequence 19 6 0.8 1006 4 US-09-620-412C-190 Sequence 19 6 0.8 10102 4 US-09-612-402B-2 Sequence 2, 6 0.8 1013 2 US-08-866-650-3 Sequence 3, 6 0.8 1013 2 US-09-812-4073-3 Sequence 3, 6 0.8 1013 3 US-09-240-473-3 Sequence 3, 6 0.8 1013 4 US-09-612-402B-16 Sequence 15	6 0.8 996 4 US-10-101-464A-933 Sequence 88: 6 0.8 996 4 US-10-101-464A-933 Sequence 91: 6 0.8 998 4 US-10-101-464A-914 Sequence 91: 6 0.8 1006 4 US-09-556-877-190 Sequence 19: 6 0.8 1006 4 US-09-520-412C-190 Sequence 19: 6 0.8 1006 4 US-09-598-419-190 Sequence 19: 6 0.8 1013 2 US-09-512-402B-2 Sequence 2: 6 0.8 1013 2 US-08-866-650-3 Sequence 3: 6 0.8 1013 2 US-09-612-87-3 Sequence 3: 6 0.8 1013 3 US-09-240-473-3 Sequence 3: 6 0.8 1013 4 US-09-612-402B-15 Sequence 15

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FITLE OF INVENTION:
FILE REFERENCE: PT004P1
CURRENT APPLICATION NUMBER: US/10/067,422
CURRENT FILING DATE: 2002-02-07
PRIOR APPLICATION NUMBER: 09/685,899
PRIOR FILING DATE: 2000-01-011
PRIOR APPLICATION NUMBER: PCT/US00/09028
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: FCT/US00/09028
PRIOR APPLICATION NUMBER: 60/152,933
PRIOR FILING DATE: 1999-09-09
PRIOR APPLICATION NUMBER: 60/147,020
PRIOR FILING DATE: 1999-08-03
PRIOR APPLICATION NUMBER: 60/131,672
PRIOR APPLICATION NUMBER: 60/130,693
PRIOR FILING DATE: 1999-04-29
PRIOR FILING DATE: 1999-04-29
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APPLICANT: Ni et al.
TITLE OF INVENTION: Bone Morphogenic Protein (BMP) Polynucleotides, Polypeptides,
TITLE OF INVENTION: Antibódies
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IKTADLKVVLGKFYRDDDRDEKTIQSLQISAIILHPNYDPILLDADIAILKLLDKARIST
                                                                                                           PFGDLPMGYQHLHTQLQYECISPFYRRLGSSRRTCLRTGKWSGRAPSCIPICGKIENITA
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US-10-067-422-17
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US-10-067-422-16
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Matches
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 17
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PRIOR FILING DATE: 1999-04-23
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 16
LENGTH: 12
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Patent No.
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PRIOR APPLICATION NUMBER: 09/685,899
PRIOR FILING DATE: 2000-10-11
PRIOR APPLICATION NUMBER: PCT/US00/09028
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 60/152,933
PRIOR FILING DATE: 1999-09-09
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PRIOR
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                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/152,933
PRIOR FILING DATE: 1999-09-09
PRIOR APPLICATION NUMBER: 60/147,020
PRIOR FILING DATE: 1999-08-03
PRIOR APPLICATION NUMBER: 60/131,672
PRIOR APPLICATION NUMBER: 60/131,672
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CURRENT FILING DATE: 2002-02-07
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PRIOR FILING DATE: 2000-10-11
PRIOR APPLICATION NUMBER: PCT/US00/09028
PRIOR FILING DATE: 2000-04-06
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PRIOR FILING DATE: 1999-04-29
PRIOR APPLICATION NUMBER: 60/130,693
PRIOR FILING DATE: 1999-04-23
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                                                                                                            FILING DATE: 1999-04-29
APPLICATION NUMBER: 60/130,693
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o. 6743613
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                                                                                                                                      PRIOR APPLICATION NUMBER: PCT/US99/01259
PRIOR FILING DATE: 1999-01-21
NUMBER OF SEQ ID NOS: 40
SEQ ID NO 28
LENGTH 1990-01-21
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Best Local Similarity
Matches 12; Conserv
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GENERAL INFORMATION:
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SEQ ID NO 4
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Patent No. 6277972
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 Best Local
Matches
                           Query Match
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APPLICANT: Verroust, Pierre
TITLE OF INVENTION: Cubilin Protein,
TITLE OF INVENTION: and Uses Thereof
FILE REFERENCE: D6148
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PRIOR FILING DATE: 1998-08-10
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CURRENT APPLICATION NUMBER: US/09/374,135
CURRENT FILING DATE: 1999-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: BPC-1: A SECRETED BRAIN-SPECIFIC PROTEIN EXPRESSED AND TITLE OF INVENTION: SECRETED BY PROSTATE AND BLADDER CANCER CELLS FILE REFERENCE: 1703-017.US1
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                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/341,461
CURRENT FILING DATE: 2000-07-20
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                                                                          OTHER INFORMATION: amino acid sequence of Bmp-1
                                                                                                    TYPE: PRT
ORGANISM: human
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                                                                                        FEATURE:
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Similarity 9; Conserv
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9; Conservative
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Leong, Kahan
Raitano
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Saffran, Douglas C.
Jakobovits, Aya
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ilarity 100.0%;
Conservative (
 1.2%; Score 9; DB llarity 100.0%; Pred. No. 0. Conservative 0; Mismatches
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                DB 4;
o. 0.64;
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                             Length 110;
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YDYVEVRDG 64

179 YDYVEVRDG 187

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TYPE: PRT
GRGANISM: Homo sapiens
US-09-438-046-20
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SOFTWARE: PatentIn Ver.
SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atent No. 6706687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR D, TITLE OF INVENTION: THEREFOR, AND USES THEREOF FILE REFERENCE: Ulf Erikeson et al 1064-44833 CURRENT APPLICATION NUMBER: US/09/438,046 CURRENT FILING DATE: 1999-11-10 EARLIER APPLICATION NUMBER: 60/107,852
                                                                                                                                                                                                                                                                                                                      atent No. 6258584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EARLIER FILING DATE: 1999-10-05
                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: ERIKSSON, Ulf
APPLICANT: AASE, Karin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: UUTELA, Marko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: PONTN, Annica
                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                            MBER OF SEQUENCES:
                                                                  COUNTRY:
                                                                                                        STREET: 1155 Av
                                                                                                                                                                                                LE OF INVENTION:
                                                                                                                                            DDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           179 YDYVEVRDG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/157,756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/157,108 FILING DATE: 1999-10-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 1998-11-10
APPLICATION NUMBER: 60/113,997
FILING DATE: 1999-12-28
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                                                         10036-2711
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LING DATE: 1999-08-26
                                                                                                                                                                                                                                                                                                                                    Application US/08872757
                                                                                         New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09438046
                                                                                                                           1155 Avenue of the Americas
                                                                                                                                                                                                                                Sieron, Aleksander
                                                                                                                                                                                                                                                              Prockop, Darwin J.
Hojima, Yoshio
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                                                                                                                                             Pennie & Edmonds
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                                                                                                                                                                                              RECOMBINANT C-PROTEINASE AND PROCESSES; METHODS AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.2%; Score 9; DB 4;
100.0%; Pred. No. 0.65;
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US-09-850-048A-2
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Best Local Similarity 100.0%;
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/09850048A
Patent No. 6562613
GENERAL INFORMATION:
APPLICANT: Prockop, Darwin J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0 FILING DATE: 01-MAR-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
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                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/09/850,048A
FILING DATE: 07-May-2001
CLASSIFICATION: CUnknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 10-JUI
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REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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TYPE: amino acid
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                                 APPLICATION NUMBER: 08/609,187
FILING DATE: 1996-03-01
ATTORNEY/AGENT INFORMATION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 8389-028-999
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: RECOMBINANT C-PROTEINASE AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                    CITY: New York
STATE: New York
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TELEPHONE: 415-854-3660
TELEFAX: 415-854-3694
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01-MAR-1996
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                                                                                                                                           US-08-572-225-1
                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/572,225
FILING DATE: 13-DEC-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
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                                                                                    Query Match
Best Local Similarity
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Patent No. 5807981
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                                                                     Matches
                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 8389
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-3660
TELEPAX: 415-854-3694
TELEX: 66141 DDWN**T
                                                                                                                                                                                                          TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 788 amino acids
TYPE: amino acid
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Li, Shi-Wu
APPLICANT: Sieron, Aleksai
APPLICANT: Brenner, Mitch
TITLE OF INVENTION: RECOM
TITLE OF INVENTION: DRUG I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Match 1.2%; Score 9; DB 4;
Local Similarity 100.0%; Pred. No. 3.5;
nes 9; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: New York
STATE: New York
COUNTRY: U.S.A.
                                                                                                                                                                             STRANDEDNESS:
TOPOLOGY: un
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 10036
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 730 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179 YDYVEVRDG 187
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179 YDYVEVRDG 187
                                  179 YDYVEVRDG 187
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Hojima, Yos
Li, Shi-Wu
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                                                                     Conservative
                                                                                                                                                                              unknown
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                                                                                                                                                                                             unknown
                                                                                      100.0%;
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                                                                                        1.2%; Score 9; DB 1; 100.0%; Pred. No. 3.8;
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                                                                       Mismatches
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CURRENT APPLICATION NUMBER: US/09/285,385C
CURRENT FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: 60/111873
PRIOR FILING DATE: 1998-12-11
PRIOR APPLICATION NUMBER: 60/080550
PRIOR APPLICATION NUMBER: 60/080550
PRIOR FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 22
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 19
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMSI IN KNOWN GENES ASS
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
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US-09-285-385C-2
                      RESULT 12
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US-09-949-016-6690
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US-09-949-016-6690
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APPLICANT: Greenspan, Daniel S.
APPLICANT: Scott, Ian C.
APPLICANT: Stott, Ian C.
APPLICANT: Thomas, Christina L.
TITLE OF INVENTION: MAMMALIAN TOLLOID-LIKE GENE AND PROTEIN
FILE REFERENCE: 960296,96111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19, Application US/09285385C Patent No. 6579702
                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6690
LENGTH: 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: VENTER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.2%;
Best Local Similarity 100.0%;
Matches 9; Conservative
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Best Local (
                                                                                                                                                                 Matches
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TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                             Local Similarity
les 9; Conserv
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                                                                                   377 YDYVEVRDG 385
                                                                                                              179 YDYVEVRDG 187
                                                                                                                                                             1.2%;
ilarity 100.0%;
Conservative (
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Pred. No. 4.6;
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OF DETECTION AND USES THEREOF
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Sequence 2, Application US/09285385C Patent No. 6579702
GENERAL INFORMATION:

APPLICANT: Greenspan, Daniel S.

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RESULT 14
US-09-312-283C-342
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8 15057 No. 615057
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SEQ ID NO 2
SENGTH: 1015
TYPE: PRT
ORGANISM: human
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 342, Application US/09312283C Patent No. 6573095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 1.1%; Score 8; DB 3; Best Local Similarity 100.0%; Pred. No. 3.3; Matches 8; Conservative 0; Mismatches
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 342
LENGTH: 51
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-09-188-930-342
                                                                                                                                                                                                                                                                                                                                                      Patent No. 65/June Patent No. 65
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CURRENT APPLICATION NUMBER: US/09/285,385C
CURRENT FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: 60/111873
PRIOR FILING DATE: 1998-12-11
PRIOR APPLICATION NUMBER: 60/080550
PRIOR APPLICATION NUMBER: 60/080550
PRIOR FILING DATE: 1998-04-03
             APPLICANT: Watson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Onrust, Rene
APPLICANT: Murison, James G.
APPLICANT: Kumble, Krishanand D.
TITLE OF INVENTION: Compositions Isolated from Skin Cells
TITLE OF INVENTION: and Methods for Their Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Onrust, Rene
APPLICANT: Murison, James Greg
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TITLE OF INVENTION: and Methods For Their Use
FILE REFERENCE: 11000.1011c1
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PRICANT: Thomas, Christina L.
TILE OF INVENTION: MAMMALIAN TOLLOID-LIKE GENE AND PROTEIN
REFERENCE: 11000.1011c2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     265 GYTGQRCE 272
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; NUMBER OF SEQ ID NOS: 147; SOFTWARE: PATENTIN VET. 2.1; SEQ ID NO 99; LENGTH: 96; TYPE: PRT; ORGANISM: Homo Bapiens US-09-472-087-99
Search completed: July 12, 2005, 17:22:24 Job time: 55 secs
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; ORGANISM: Mouse
US-09-312-283C-342
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CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 342
LENGTH: 51
                                                                                                                                      Query Match 1.1%;
Best Local Similarity 100.0%;
Matches 8; Conservative
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Patent No. 6002...
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Patent No. 6002...
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CURRENT FILING DATE: 1999-12-23
PRIOR APPLICATION NUMBER: 60/113,647
PRIOR FILING DATE: 1998-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MUELLER, BILLEN E.
APPLICANT: HANKE, JEFFREY H.
APPLICANT: GILMAN, STEVEN C.
APPLICANT: DAVIS, C. GEOFFREY
APPLICANT: CORVALAN, JOSE R.
TITLE OF INVENTION: HUMAN MONOCLONAL ANTIBODIES TO CTLA-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: HANSON, DOUGLAS C.
APPLICANT: NEVEU, MARK J.
APPLICANT: MUELLER, BILLEN E
APPLICANT: HANNE, JEFFREY H.
APPLICANT: GILMAN, STEVEN C.
                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: ABX-PF1
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US-09-997-428-231

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US-10-063-742-38

US-10-972-317-38

US-10-004-551-2

US-10-004-551-4

US-10-098-871-26

US-10-098-871-26

US-10-408-765A-1796

US-10-274-639-17

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US-10-333-574-17

US-10-067-422-9

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Sequence
231, App
170, App
38, Appl
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17, Appl
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17, Appl
19, Appl
   1 US-09-833-245-1402
3 US-10-067-422-17
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5 US-10-112-944-309
6 US-10-723-860-137
7 US-10-861-87-83-1655
7 US-10-43-468-40
8 US-10-194-975-91
9 US-10-43-468-40
9 US-10-43-468-78
9 US-10-43-468-7
Sequence 1402, App Sequence 17, Appli Sequence 20, Appli Sequence 21, Appli Sequence 21, Appli Sequence 242, Appli Sequence 27, Appli Sequence 27, Appli Sequence 27, Appli Sequence 30, Appli Sequence 30, Appli Sequence 31, Appli Sequence 21, Appli Sequence 31, Appli Sequence 3146, Appli Sequence 3146, Appli Sequence 315, Appli Sequence 316, Appli Sequence 316, Appli Sequence 317, Appli Sequence 317, Appli Sequence 318, Ap
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